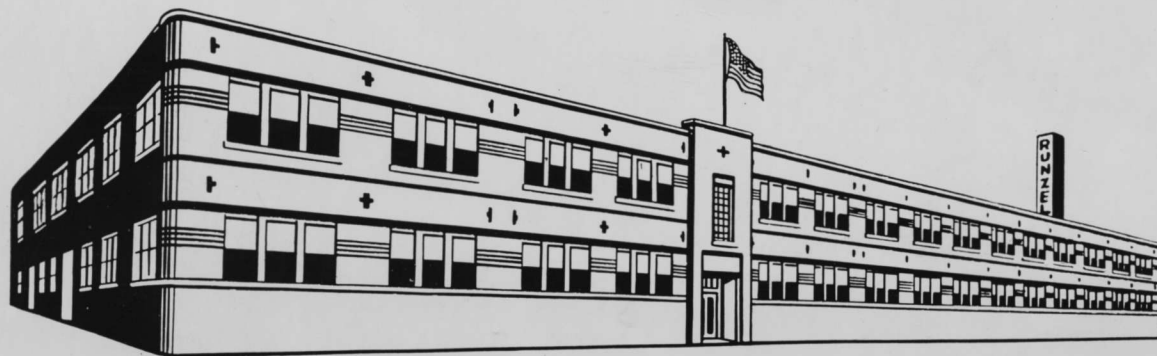


Runzel

TELEPHONE CORD CATALOG



MANUFACTURERS OF ELECTRICAL CORD, WIRE AND CABLE

RUNZEL CORD & WIRE CO.

4723-31 MONTROSE AVENUE • CHICAGO 41

TELEPHONE CORD CATALOG

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Runzel

CORD & WIRE COMPANY

MANUFACTURERS OF CORDS, WIRES AND CABLES

4723-31 WEST MONTROSE AVENUE • CHICAGO 41, ILLINOIS

Dear Friend:

I am taking this opportunity to invite our friends in the Telephone Industry to visit our plant whenever it is convenient.

Those of you who have specified RUNZEL CORDS in the past are fully aware of the high quality of our products and the service we are equipped to give. The repeat business we receive assures us of this.

Broadening our scope of service to new accounts however, is also of vital interest to us, since we are constantly extending our facilities in order to render the best possible cooperation to the Telephone Industry as a whole.

For more than a half century my family has concentrated on making cords, wires and cables. My father was one of the pioneers in the field. Like many another man who devotes his entire span of life to one art, profession or industry, he got a keen satisfaction out of making a good product and giving good service; regardless of whether times were good or bad.

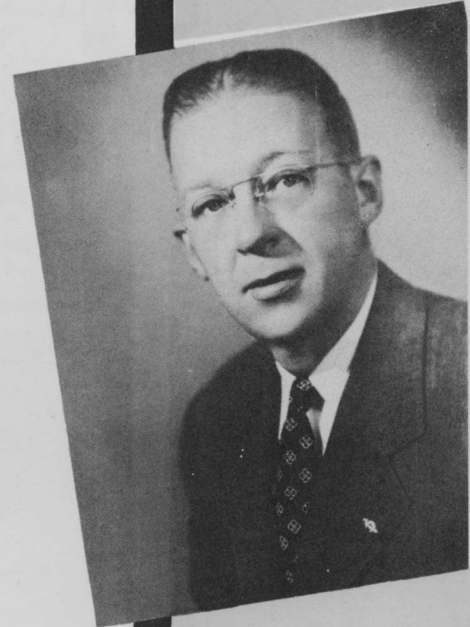
New developments to meet modern improvements in telephone service - experiments with new materials - greater efficiency in manufacturing processes - efforts such as these are going on continuously within these walls. Our reward has been ample. We enjoy the confidence of our customers - the growth of our business.

We have prepared this catalog to facilitate the selection of the best type of cord for your every requirement, and to simplify ordering replacements for those who wish to change to RUNZEL CORDS for the improvement of their service.

We assure you of complete satisfaction in all dealings with us and look forward to serving you.

Sincerely,

President
Runzel Cord & Wire Company



TESTING AND DEVELOPMENT LABORATORY

The RUNZEL LABORATORY was prompted and created through the desire of the management to:

1. Scientifically develop and improve the products of the Runzel Cord & Wire Co.
2. Provide a cord clinic whereby accomplishments (or failures) of new processes may be scientifically analyzed.
3. Study action and reaction of chemical influences upon its various products.
4. Technically explore causes for cord failures as they occur in practical usage.
5. To replace theories with candid and scientific fact.
6. Provide diagnostic proof for the manufacturing technique of its products.
7. Maintain exacting quality standards.

Mr. W. L. Runzel, Jr., founder of the Runzel Laboratory, in order to perform an authoritative and exhaustive diagnostic research service to the industry has provided a rare complement of scientific apparatus such as might be found in the Laboratories of our great Universities of technical learning. No facility has been denied, no expense spared to place at the disposal of the technician such equipment as required to explore every phase of analysis as applied to the communications field.

RUNZEL LABORATORY

Abrasion Testers . . . determine resistance to wear of outer coverings.

Humidity Cabinet . . . for testing waterproof properties of cords.

Tensile tester . . . for testing tensile strength, elongation and set of materials used in cord manufacture.

Dielectric testers . . . to test the insulating properties of materials. Dielectric strength.

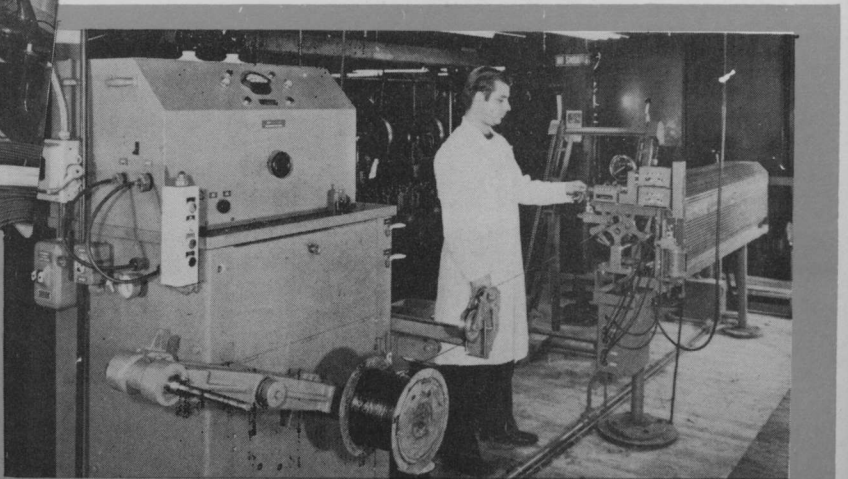
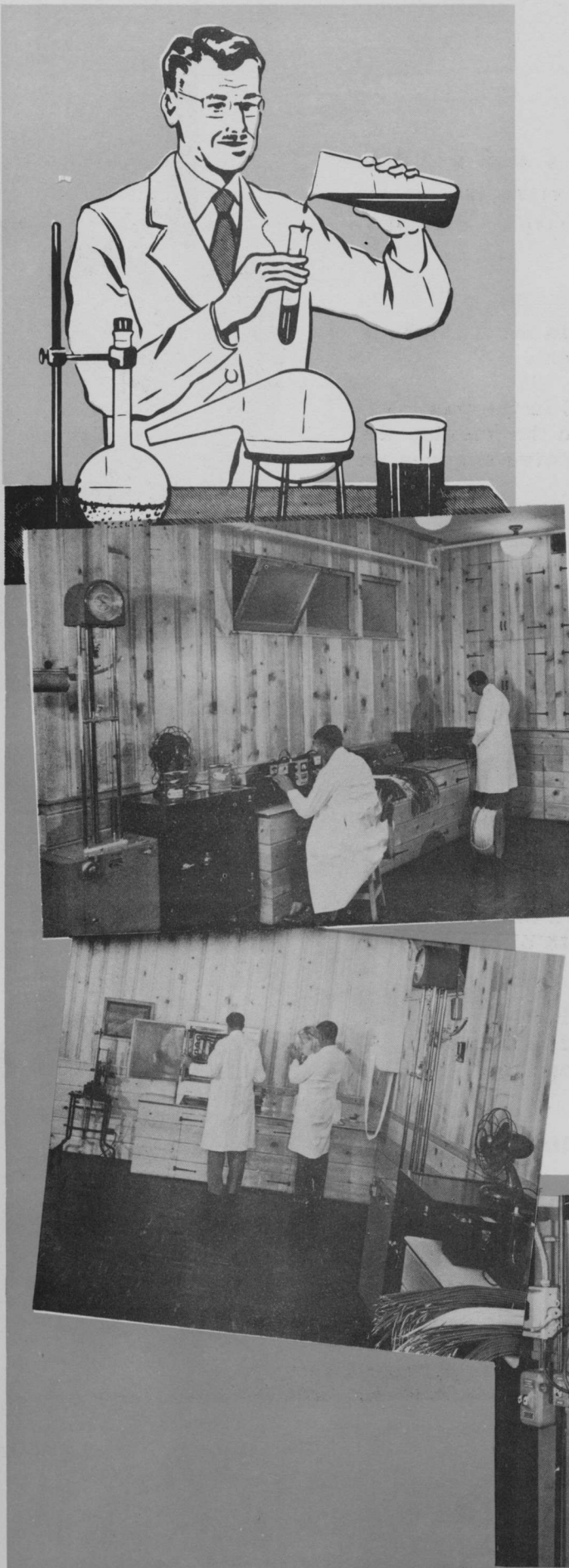
Capacity bridge . . . to measure the capacity between conductors.

Cord testers . . . to check continuity, resistance and dielectric strength of telephone cords.

Aging Ovens . . . to determine life of materials used in cords.

Fault locator . . . detects shorts or opens in telephone cable.

Spark tester . . . Every foot of RUNZEL wire is assured of perfection when it passes through this apparatus. Any dielectric flaw in covering would immediately "STOP" entire machine.



This Catalog

This catalog departs from precedent in Telephone Cord catalogs and is, we believe, the most comprehensive reference book and guide to Telephone Cord replacements ever published.

Proper selection of the desired cord for every type instrument is made simple—delays through incorrect specifying is eliminated and a full understanding of every detail is immediately at hand.

How to select proper cords

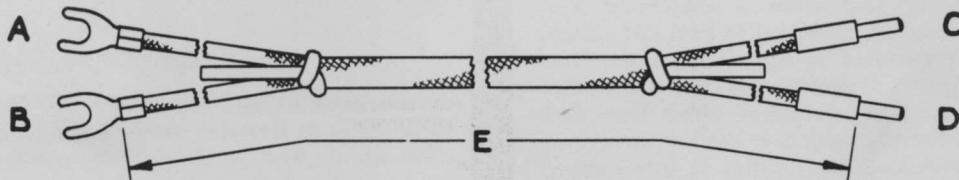
To aid you in choosing the proper cords for the equipment you use, this catalog presents three methods of selection. For purposes of illustration let us assume that you wish to order a two conductor deskstand cord but you are not certain of its trim. By referring to our index, you can locate the page number for "DESKSTAND CORDS—TWO CONDUCTOR"; turning to the page indicated, notice that in this section, as in all others, there is a replacement list which indicates the Runzel cord made as a replacement to the other manufacturer's types. If you know the original manufacturers' cord code number you can easily trace it in our replacement listing to choose the proper RUNZEL cord.

If information is lacking on the original cord code number you can trace the proper cord by referring to the "Specifications" which immediately follow the replacement list. Here you will find exacting details on the trim and make-up of all cords shown in that section. By comparing the

trim of the cord you wish to replace against the trim in the specification listing or by referring to the column entitled "To Be Used On The Following Equipment" you can locate the instruments on which the cord is to be used. Then note the RUNZEL code number of that cord and you have made the correct selection.

The foregoing has briefly described the methods of cord selection, however we suggest that you read the following section which describes the method we have used to give you exacting specifications of each and every cord shown in our catalog.

Owing to the thorough coverage of all types of telephone instrument and switchboard cords embraced in this catalog, a master-guide cord detail is given under each general classification. By following the specifications of any one type of cord, all other types can be easily examined by the same method.



DESKSTAND CORDS--TWO CONDUCTOR--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	TRACER COLORS	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	CORD LENGTH "E"	TO BE USED ON THE FOLLOWING EQUIPMENT:
2003	300	Green Red	A B	4-1/2" 4-1/2"	238 238	s/c	C D	4-1/2" 4-1/2"	238 238	s/c	72"	S.C. Handset 1179 & Amer. Elec. Deskstands
2004	301	Green Red	A B	5" 5"	238 238	212	C D	4-1/2" 4-1/2"	238 238	s/c	72"	S.C. 1222 Handset

DESK STAND CORDS, TWO CONDUCTOR—SPECIFICATIONS

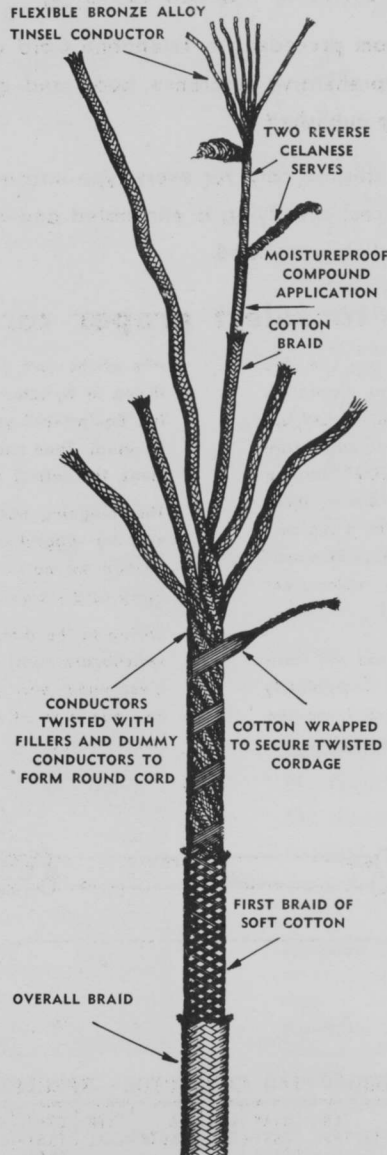
EXPLANATION OF MASTER GUIDE AND SPECIFICATIONS

The master-guide cord shown above is a two conductor desk-stand cord. As you will notice each leg or conductor is marked with a letter, i.e., A, B, C and D. The letter is an identification for the leg and refers to the detail shown in the specification immediately below. For example, Leg "A" referring to the specification, has a tracer color of green and is 4½ inches long with a No. 238 terminal attached. Leg "B" has a red tracer color, and is also 4½ inches long with a No. 238 terminal attached. The next column in the specification describes the type of stay fastener. In this case s/c indicates that there is a stay cord. Letters "C" and "D" follow the same pattern for the legs on the opposite end of the cord. Tracing them in the specification you will note they are both 4½ inches long and each have a No. 238 terminal attached. Their tracer colors, of course, are in accordance with "A" and "B". This end of the cord also has a stay cord as a fastener. The overall cord length is indicated by the letter

"E" and is exactly as indicated on the drawing, in that it is measured from the necks of the terminal of opposite ends, except when there is an asterisk indicating body length. The body length of a cord is that part of the cord which is covered by the outer braid or the distance between the beginning of the legs of the opposite ends.

The last column of specifications refers to the equipment for which the cord is intended. Detailed drawings of each terminal are shown on the last four pages of this catalog.

The detail to which this catalog is carried may not be necessary for the basic information you need for ordering, but we believe the catalog will be of value to you in selecting the proper replacements for your equipment and as a reference.



General Information

1. Standard switchboard overall braid is white if no other color is specified. Red and green available upon request.
2. Standard instrument overall braid is brown; black will be supplied upon request.
3. All railroad instrument cord orders are supplied with standard brown glazed overall braids unless black is specified.
4. Code numbers underscored on Replacement Lists indicate the original manufacturer.
5. Runzel original cords indicate a cord designed by our engineers.
6. When more than one code number appears in the Old Runzel

Code Number Column on the Replacement Sheets, this indicates the named cords were so similar in trim as to permit consolidation under the present trim.

TERMS AND SHIPPING GUARANTEE:

Runzel Cords are guaranteed to meet all service and engineering requirements. Any defective material may be returned for credit or replacement.

RETURN SHIPMENTS:

In the event material is to be returned to our plant for credit or replacement please write us for complete return instructions. All such requests will have our prompt attention.

TERMS:

All domestic accounts are sold at 2% 10 days, net 30 days.

ROUTING:

Shipping terms are f.o.b. Chicago, Illinois. Shipments will be via best way unless specific route is indicated. Parcel Post shipments are insured for full value at a nominal charge.

ORDERS:

Catalog number and description should be shown when ordering material. Standard insulations, colors and lengths will be furnished unless otherwise specified.

Telephone or telegraph orders should be immediately confirmed by mail and marked "Confirming." Verbal or wired orders will not be shipped until written confirmation is received.

7. An asterisk appearing in the Cord Length Column indicates body length only exclusive of leg lengths.
8. Switchboard and Patch Cord diameters are shown in either decimal or fraction dimensions in accordance with the practice of the original manufacturer.
9. All cord lengths shown are the standard lengths furnished.

WHY RUNZEL CORDS GIVE LONG AND SATISFACTORY SERVICE

To witness the manufacture of RUNZEL cords never fails to fascinate visitors to our plant. Each operation, while intricate almost to the point of appearing tedious, is nevertheless accomplished with precision dexterity. Specially designed automatic machines make light work of a seemingly difficult series of operations which result in a finished product of much finer quality than the hand-weavers of olden times ever even hoped to attain.

The basic conductor in all RUNZEL cords consists of a fine bronze alloy tinsel wire made up into six strand, twelve thread cords. This delicate tinsel contributes the strength-flexibility which is so essential in all types of telephone instrument and switchboard cords. It is so constructed as to withstand hard usage, yet flexible beyond the prescribed formula of electrical engineering standards.

In addition to the fine materials used in the manufacture of RUNZEL cords, years of experience, scientific research, laboratory tests, experimentations by trial and error procedures . . . round out a product that meets every requirement of a gigantic industry . . . an industry which today circles the globe with a net work of wire . . . carrying the communication systems of Governments, Kingdoms and Republics . . . Industries of world-wide operation . . . People of every walk of life.

CONSTRUCTION DETAILS

All RUNZEL telephone instrument and switchboard cords have their beginning with the above referred to tinsel wire conductor. We then proceed to insulate, twist, braid and trim to develop your finished RUNZEL cord. It is the painstaking care in these processes which improve the fine adaptability, smooth, long wearing braids and properly insulated conductors which are responsible for the clarity of reception for which RUNZEL cords are popularly known.

To provide our customers with a choice of grades or qualities of cords, we maintain a selection of inner conductor insulations and outer braids for all types of telephone instrument and switchboard cords. The following paragraphs will describe the various grades available which you may

see fit to use in the equipment you order. Each grade has been thoroughly tested in both laboratory and service. Various climates or service conditions determine which type of insulation or outer braid is best suited to your requirements.

"MOISTUREPROOF INSULATION"

Moistureproof insulation consists of an even, double serve or wrap of fine thread cellulose acetate applied in opposite directions over the tinsel. An asphaltic wax compound is applied on the cellulose acetate insulated conductor to serve as a guard against dampness and moisture. It is so applied as to penetrate the outer serve to a certain degree without touching the tinsel conductor and yet thick enough to insure the greatest amount of moistureproofing possible. This compound will not harden and remains pliable to give the greatest amount of flexibility. A soft cotton braid is applied over the moistureproofed tinsel conductor to complete the insulation. Our basic line of telephone instrument and switchboard cords utilize this type of insulated tinsel conductor. The outer braid of moistureproof cords consist of mercerized cotton on instrument cords and glazed cotton on switchboard cords.

"THERMOPLASTIC INSULATION"

A few years ago a satisfactory thermoplastic compound was formulated which would encase the delicate tinsel conductor in a non-injurious, waterproof, flexible, and color coded jacket. This type of insulation has proved to be exceptionally serviceable because it is waterproof and immune to such harmful solvents as petroleum products, oils, grease, etc., and most acids, including hand sweat. The thermoplastic compound we use is staple, will not decompose, nor will it become dry or brittle. This insulation remains flexible and serviceable within wide temperature limits, a problem which previously had barred the use of such insulation. After the many years of experience and study with this type of insulation, we consider it the best type available.

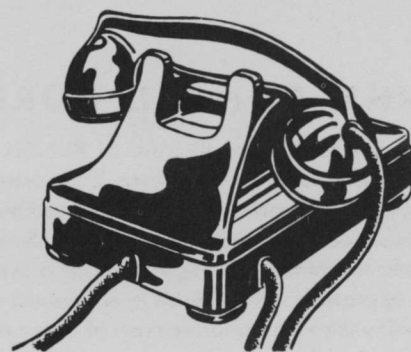
The following types of outer braids are supplied on moistureproof and thermoplastic insulated conductors and are designated by the figures "V", "VB" and "VN". The figure "V" denotes the thermoplastic insulation of the tinsel conductor and the figure immediately following, the type of braid.

RUNZEL TELEPHONE CORD INSULATIONS:

<u>Insulation:</u>	<u>Outer Braid:</u>	<u>Supplied on:</u>	<u>Order:</u>
Moistureproof	Mercerized cotton Glazed cotton	Instrument cords Switchboard cords	By code no. only
Thermoplastic Insulated Tinsel "V"	Mercerized cotton Glazed cotton	Instrument cords Switchboard cords	Follow code no. with "V" suffix
Thermoplastic Insulated Tinsel & Thermoplastic Braid "VB"	Thermoplastic Monofilament Thread Braid	Instrument cords only	Follow code no. with "VB" suffix
Thermoplastic Insulated Tinsel & Nylon Outer Braid "VN"	Nylon Thread Braid	Switchboard cords only	Follow code no. with "VN" suffix

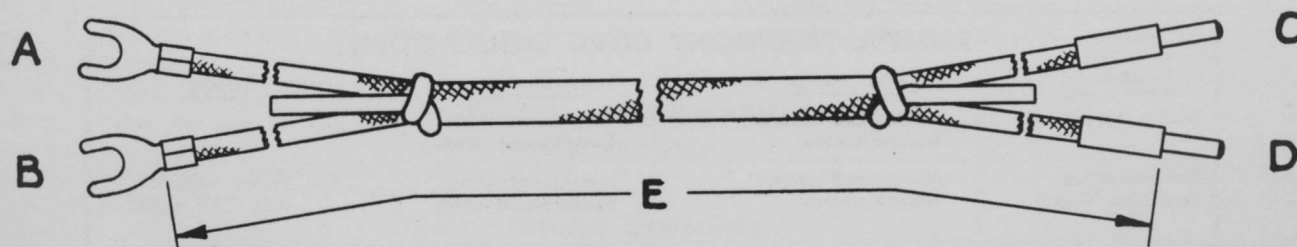
Runzel

DESKSTAND CORDS



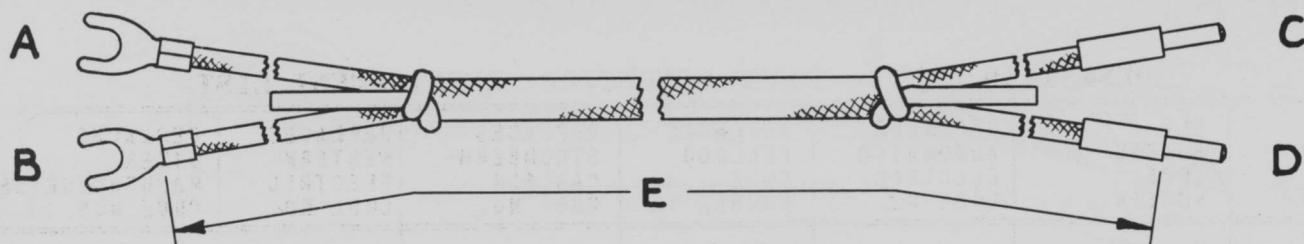
DESKSTAND CORDS--TWO CONDUCTOR--REPLACEMENT LIST

NEW RUNZEL CODE NUMBER	OLD RUNZEL CODE NUMBER	REPLACES AUTOMATIC ELECTRIC CODE NO.	REPLACES KELLOGG CODE NUMBER	REPLACES STROMBERG-CARLSON CODE NO.	REPLACES WESTERN ELECTRIC CODE NO.	REPLACES OTHER MANUFACTURERS CODE NOS.
2D01	30	AD-28	<u>F-665-D</u>	-	-	-
2D02	303	<u>AD-12</u>	F-665-DA	-	-	-
2D03	300	AD-43	-	<u>MD-2C</u>	-	-
2D04	309	-	-	<u>MD-2H</u>	-	-
2D05	301	-	F-665-DB	<u>MD-2F</u>	-	-
2D06	308	-	-	<u>MD-2G</u>	-	-
2D07	312, & 305	<u>AD-18</u>	-	-	-	-
2D08	306	<u>AD-56</u>	-	-	-	-
2D09	130-RC	-	F-740-D	-	<u>D2D</u>	N.E. F-1204
2D10	310	-	-	-	<u>D2H</u>	-
2D11	304	<u>AD-26</u>	-	-	-	-
2D12	31	AD-32	<u>667-D</u>	-	-	-
2D13	31-A	AD-38	<u>665-D</u>	-	-	-
2D14	31-AA	AD-44	665-DA	<u>MD-2D</u>	-	-
2D15	307	-	-	-	-	<u>Runzel Original</u>
2D16	302	-	-	<u>MD-2B</u>	-	-
2D17	-	-	-	-	<u>D2E</u>	-



DESKSTAND CORDS--TWO CONDUCTOR--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	TRACER COLORS	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	CORD LENGTH "E"	TO BE USED ON THE FOLLOWING EQUIPMENT:
2D01	30	Brown Black	A B	4" 4"	237 237	s/c	C D	2" 2"	237 237	s/c	72"	Kellogg F-39, F-75, F-97, F-111 Stands also 900 & 925 Combination Master-phones
2D02	303	Brown Red	A B	3" 3"	237 237	s/c	C D	5" 5"	237 237	s/c	72"	A.E. Type 34A3 & Type 7 Monophones



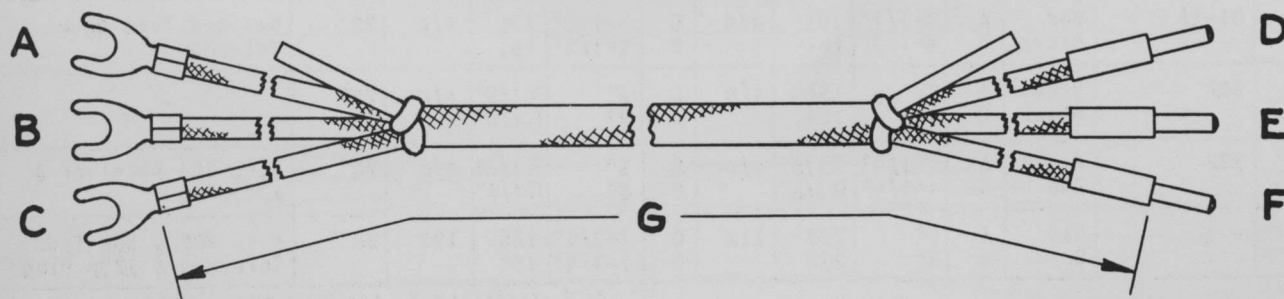
DESKSTAND CORDS - - TWO CONDUCTOR - - SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	TRACER COLORS	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	CORD LENGTH "E"	TO BE USED ON THE FOLLOWING EQUIPMENT:
2D03	300	Green Red	A B	4-1/2" 4-1/2"	238 238	s/c	C D	4-1/2" 4-1/2"	238 238	s/c	72"	S.C. Handset 1179 & Amer. Elec. Deskstands
2D04	309	Green Red	A B	5" 5"	238 238	212	C D	4-1/2" 4-1/2"	238 238	s/c	72"	S.C. 1222 Handset
2D05	301	Green Red	A B	7" 7"	238 238	212	C D	4-1/2" 4-1/2"	238 238	s/c	78"	S.C. 1191B, 1192, 1212A Handset Telephones
2D06	308	Green Red	A B	7" 7"	238 238	212	C D	7" 7"	238 238	212	78"	S.C. 1202 & SK3400 Telephones
2D07	312, 305	Brown Yellow	A B	3" 2-1/2"	237 237	s/c 1/2"	C D	1-3/4" 1-3/4"	237 237	222	72"	A.E. Type 40 Monophone
2D08	306	Black Yellow	A B	2" 2"	233 233	220	C D	3" 2-3/8"	233 233	s/c	72"	A.E. Equipment
2D09	130-RC	Red Green	A B	5" 4"	233 233	212	C D	1-5/8" 1-5/8"	233 233	213	66"	W.E. 302 & 305 Telephone Set
2D10	310	Green Red	A B	BARED & SOLDERED TO 193 1-3/4" 158			C D	5" 5"	233 233	s/c	66"	W.E. Portable Subscriber Set & W.E. 273 Plug
2D11	304	Brown Red	A B	1-1/4" 1-1/4"	Bare Bare	s/c	C D	2-5/8" 2-5/8"	237 237	s/c	68"	A.E. Equipment
2D12	31	Brown Black	A B	4" 4"	151 151	s/c	C D	2" 2"	237 237	s/c	72"	Kellogg Equipment
2D13	31-A	Brown Black	A B	4" 4"	151 151	s/c	C D	2" 2"	151 151	s/c	72"	Kellogg Equipment
2D14	31-AA	Red Green	A B	4-1/2" 4-1/2"	151 151	s/c	C D	4-1/2" 4-1/2"	151 151	s/c	72"	Garford Type Desk Telephones
2D15	307	Brown Black	A B	4" 4"	151 151	s/c	C D	2" 2"	TL 1/8" TL 1/8"	s/c	72"	-
2D16	302	Green Red	A B	1-1/4" 1-1/4"	TL 1/8" TL 1/8"	s/c	C D	3" 3"	TL 1/8" TL 1/8"	s/c	72"	S.C. 20A Receiver & #23 plug
2D17	-	Red Green	A B	5" 4"	233 233	212	C D	1-3/4" 1-3/4"	158 158	193	66"	W.E. 302 & 305 Type Telo. Set & 273A Plug

TL - TINSEL LOOP * BODY LENGTH

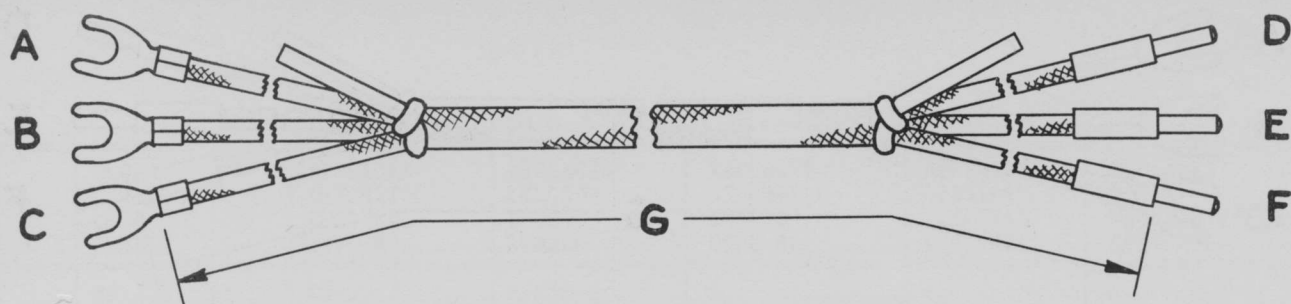
DESKSTAND CORDS--THREE CONDUCTOR--REPLACEMENT LIST

NEW RUNZEL CODE NUMBER	OLD RUNZEL CODE NUMBER	REPLACES AUTOMATIC ELECTRIC CODE NO.	REPLACES KELLOGG CODE NUMBER	REPLACES STROMBERG-CARLSON CODE NO.	REPLACES WESTERN ELECTRIC CODE NO.	REPLACES OTHER MANUFACTURERS CODE NOS.
3D01	35	-	F-641-D	-	-	-
3D02	322 & M-35	AD-10	F-641-DA	-	-	Amer. Elec. MC-54260, & Monarch 54202
3D03	32	AD-34	F-640-D	-	-	-
3D04	37 & 320	AD-45	-	MD-3C	-	-
3D05	328	-	-	MD-3H	-	-
3D06	36	AD-41	F-674-D	-	-	-
3D07	321	-	F-686-D	MD-3F	-	-
3D08	327	-	-	MD-3G	-	-
3D09	326 & 323	AD-57	-	-	-	-
3D10	333	-	-	-	366	-
3D11	325-RC	-	F-739-D	-	D3AL	-
3D12	33 & 167-RC	AD-55	F-639-D	-	D3AB	-
3D13	69 & 169-RC	AD-48	F-730-D	-	D3AK	-
3D14	324-RC	-	-	-	-	N.E. F-1205
3D15	332-RC	-	-	-	D3AD	-
3D16	329	-	-	-	-	Runzel Original
3D17	35-B	-	-	-	-	Runzel Original
3D18	34	-	669-D	-	-	-
3D19	35-A & 341-A	AD-36	641-D	-	-	-
3D20	34-AA & 34-A	AD-46	-	MD-3D	-	-
3D21	34-B	-	-	-	-	Runzel Original



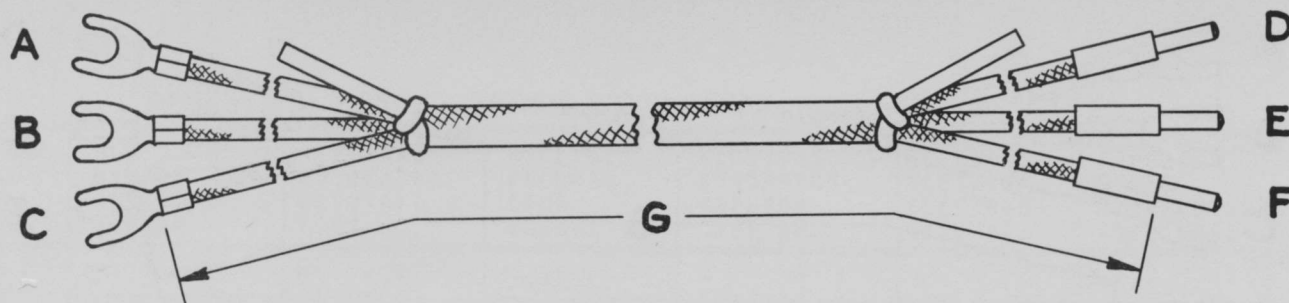
DESKSTAND CORDS--THREE CONDUCTOR--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	TRACER COLORS	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	CORD LENGTH "G"	TO BE USED ON THE FOLLOWING EQUIPMENT
3D01	35	Brown Black Yellow	A B C	4" 4" 4"	237 237 237	s/c	D E F	2" 2" 2"	237 237 237	s/c	72"	Kellogg F-84, F-110 & F-115 Stands
3D02	322	Brown Yellow Red	A B C	3" 3" 3"	237 237 237	s/c	D E F	5" 5" 5"	237 237 237	s/c	72"	A.E. Type 200 Deskstands, 11A & 15A Mono. & Type 21 Deskstands with 2-winding induction coils & Amer. Elec.



DESKSTAND CORDS--THREE CONDUCTOR--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	TRACER COLORS	LEG REF.	LEG LENGTH	TERM- INAL	STAY FAST- ENER	LEG REF.	LEG LENGTH	TERM- INAL	STAY FAST- ENER	CORD LENGTH "G"	TO BE USED ON THE FOLLOWING EQUIP- MENT
3D03	32	Green Yellow Red	A B C	4" 4" 4"	237 237 237	s/c	D E F	4" 4" 4"	237 237 237	s/c	72"	Kellogg F-115-A, F-118 F-118-B, F-135, F-138 & F-301 Stands also 900 & 925 "B" Type Combination Masterphones.
3D04	37 & 320	Red Green Yellow	A B C	4-1/2" 4-1/2" 4-1/2"	238 238 238	s/c	D E F	4-1/2" 4-1/2" 4-1/2"	238 238 238	s/c	78"	S.C. 1168, 1170, 1171, 1173, 1174, 1176, Telos. & 1177 & 1178 Handsets, also W.E. 51 Deskstand & Amer. Elec. Deskstands.
3D05	328	Green Red Yellow	A B C	5" 5" 5"	238 238 238	210	D E F	4-1/2" 4-1/2" 4-1/2"	238 238 238	s/c	72"	S.C. 1223 Handset Telephones.
3D06	36	Red Yellow Green	A B C	4" 4" 4"	237 237 237	s/c	D E F	6-1/2" 6-1/2" 6-1/2"	237 237 237	s/c	72"	Kellogg Type 700, 725, 900A & 925A Masterphones
3D07	321	Green Red Yellow	A B C	7" 7" 7"	238 238 238	210	D E F	4-1/2" 4-1/2" 4-1/2"	238 238 238	s/c	78"	S.C. 1197, 1197A, 1182, 1208 & 1212AD Telephones.
3D08	327	Red Yellow Green	A B C	7" 7" 7"	238 238 238	210	D E F	7" 7" 7"	238 238 238	210	63"	S.C. 1197, 1198 & 1207 Handsets.
3D09	326 & 323	Green Yellow Brown	A B C	2" 2-1/2" 3"	237 237 237	s/c	D E F	2" 2" 2"	237 237 237	222	72"	A.E. Type 40 Monophone Ground Ring.
3D10	333	Red Green Yellow	A B C	3" 3" 3"	233 233 233	s/c	D E F	3-1/4" 3-1/2" 2-3/4"	233 233 233	s/c	72"*	W.E. 1001C Handset.
3D11	325-RC	Red Yellow Green	A B C	5-1/4" 6" 6"	233 233 233	210	D E F	4" 4" 4"	233 233 233	229	66"*	W.E. 302 E, F, G, & H, and 304 B, C & D Type Telephone Sets
3D12	33 & 167-RC	Yellow Red Green	A B C	1-3/8" 2-7/8" 1-1/4"	233 233 233	s/c	D E F	6" 6" 6"	233 233 233	s/c	66"*	W.E. 40P Trans- mitter Arm.
3D13	69 & 169-RC	Red Yellow Green	A B C	7-1/2" 6-1/2" 6-1/2"	233 233 233	210	D E F	6" 6" 6"	233 233 233	210	66"*	W.E. 20AL, CM, 40AL, CM, 51AL, CM & 52AB Desk- stands also B1 or D1 Handset Mountings.
3D14	324-RC	Red Yellow Green	A B C	2-1/4" 1" 2-1/4"	233 233 233	229	D E F	5-3/8" 4" 4-1/2"	233 233 233	210	68"*	Northern Electric & Western Electric Equipment.
3D15	332-RC	Red Yellow Green	A B C	7-1/2" 6-1/2" 6-1/2"	233 233 233	210	D E F	1-3/4" BARE & 1-3/4"	158 SOLDER TO 193 158		66"*	W.E. 273A Plug in Conn- ection with Plug & Jack Service on 302 Tele. Sets.
3D16	329	Red Yellow Green	A B C	4" 4" 4"	233 233 233	s/c	D E F	4" 4" 4"	TL TL TL	s/c	72"	-



DESKSTAND CORDS--THREE CONDUCTORS--SPECIFICATIONS

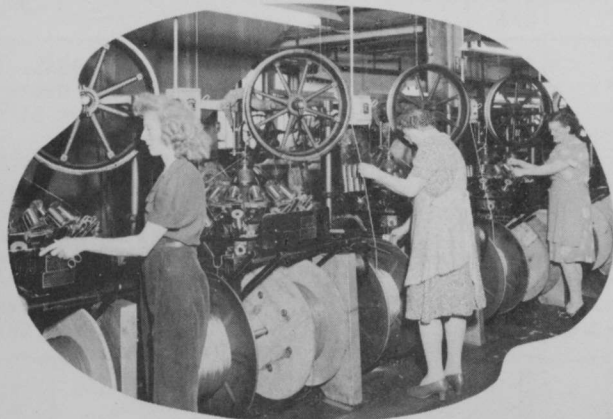
NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	TRACER COLORS	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	CORD LENGTH "G"	TO BE USED ON THE FOLLOWING EQUIPMENT:
3D17	35-B	Red Yellow Green	A B C	2" 2" 2"	151 151 151	s/c	D E F	4" 4" 4"	233 233 233	s/c	72"	-
3D18	34	Brown Red Yellow	A B C	4" 4" 4"	151 151 151	s/c	D E F	4" 4" 4"	237 237 237	s/c	72"	General Purpose Replacement Cord for Old Style Kellogg Equipment
3D19	35-A & 341-A	Brown Black Yellow	A B C	4" 4" 4"	151 151 151	s/c	D E F	2" 2" 2"	151 151 151	s/c	72"	Kellogg Equipment
3D20	34-AA & 34-A	Red Green Yellow	A B C	4-1/2" 4-1/2" 4-1/2"	151 151 151	s/c	D E F	4-1/2" 4-1/2" 4-1/2"	151 151 151	s/c	72"	Garford Type Desk Telephone
3D21	34-B	Red Yellow Green	A B C	4" 4" 4"	151 151 151	s/c	D E F	4" 4" 4"	TL TL TL	s/c	72"	-

TL - TINSEL LOOP



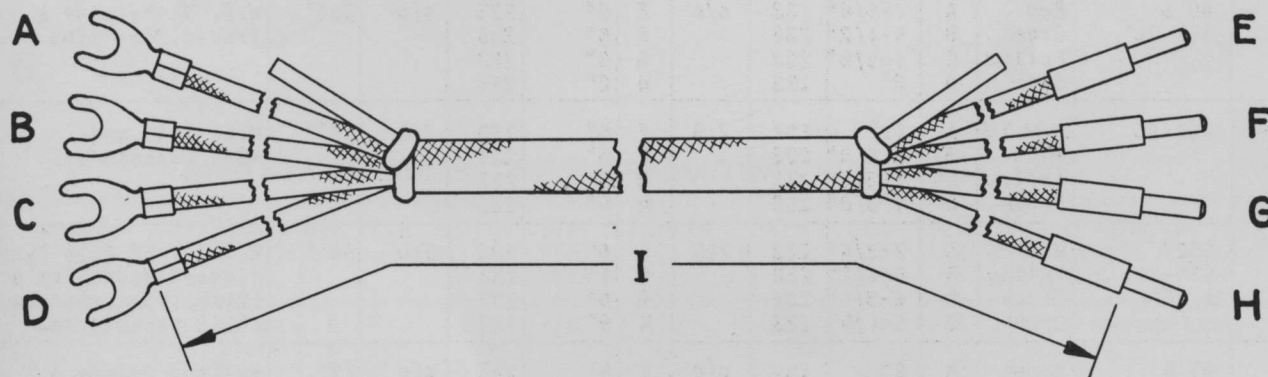
CORD MAKING

The RUNZEL plant is a veritable beehive of activity. Row after row of automatic cord braiding machines "sing a song of production" to meet the ever increasing demand for RUNZEL CORD. Special training is required to handle these machines. Constant inspections assure uniform quality.



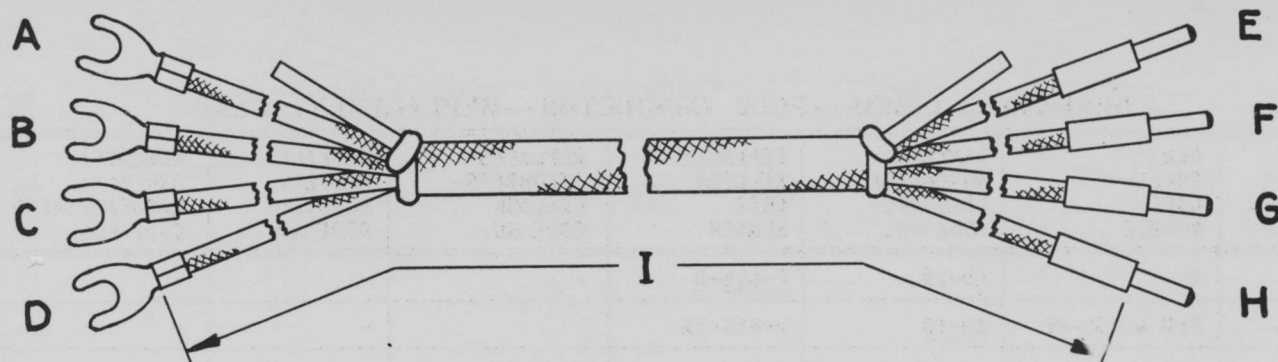
DESKSTAND CORDS--FOUR CONDUCTOR--REPLACEMENT LIST

NEW RUNZEL CODE NUMBER	OLD RUNZEL CODE NUMBER	REPLACES AUTOMATIC ELECTRIC CODE NO.	REPLACES KELLOGG CODE NUMBER	REPLACES STROMBERG-CARLSON CODE NO.	REPLACES WESTERN ELECTRIC CODE NO.	REPLACES OTHER MANUFACTURERS CODE NOS.
4D01	38	AD-29	F-666-D	-	-	-
4D02	350 & 435-WP	AD-13	F-480-DA	-	-	-
4D03	380	AD-47	F-685-DA	MD-4C	-	-
4D04	383	-	F-685-D	-	-	-
4D05	382	-	-	MD-4F	-	-
4D06	381	-	-	MD-4G	-	-
4D07	402	-	-	-	D4AC	-
4D08	40 & 384-RC	-	F-480-D	-	D4AE	-
4D09	351-RC	AD-52	-	-	D4AD	-
4D10	352, 694-RC & 353	AD-50	F-731-D	-	D4U	-
4D11	41 & 42	AD-33	189-D & 487-D	-	-	-
4D12	41-A	AD-39	666-D	-	-	-
4D13	41-AA	-	-	MD-4D	-	-
4D14	47	-	-	-	-	Runzel Original



DESKSTAND CORDS--FOUR CONDUCTOR--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	TRACER COLORS	LEG REF	LEG LENGTH	TERM-INAL	STAY FAST-ENER	LEG REF	LEG LENGTH	TERM-INAL	STAY FAST-ENER	CORD LENGTH "I"	TO BE USED ON THE FOLLOWING EQUIP-MENT:
4D01	38	Brown Black Red Yellow	A B C D	4" 4" 4" 4"	237 237 237 237	s/c	E F G H	2" 2" 2" 2"	237 237 237 237	s/c	72"	Kellogg Magneto Stands & Desk Set Boxes
4D02	350 & 435-WP	Red Yellow Brown Black	A B C D	5" 5" 5" 5"	237 237 237 237	s/c	E F G H	3" 3" 3" 3"	237 237 237 237	s/c	72"	A.E. Type 21 Telos. with 3-winding Induction Coils and Type 1A, 5A, & 9 Monophones.
4D03	380	Green Red Blue Yellow	A B C D	4-1/2" 4-1/2" 4-1/2" 4-1/2"	238 238 238 238	s/c	E F G H	4-1/2" 4-1/2" 4-1/2" 4-1/2"	238 238 238 238	s/c	72"	S.C. 1172 & 1186 Telephones also Amer. Electric Deskstands.



DESKSTAND CORDS--FOUR CONDUCTOR--SPECIFICATIONS

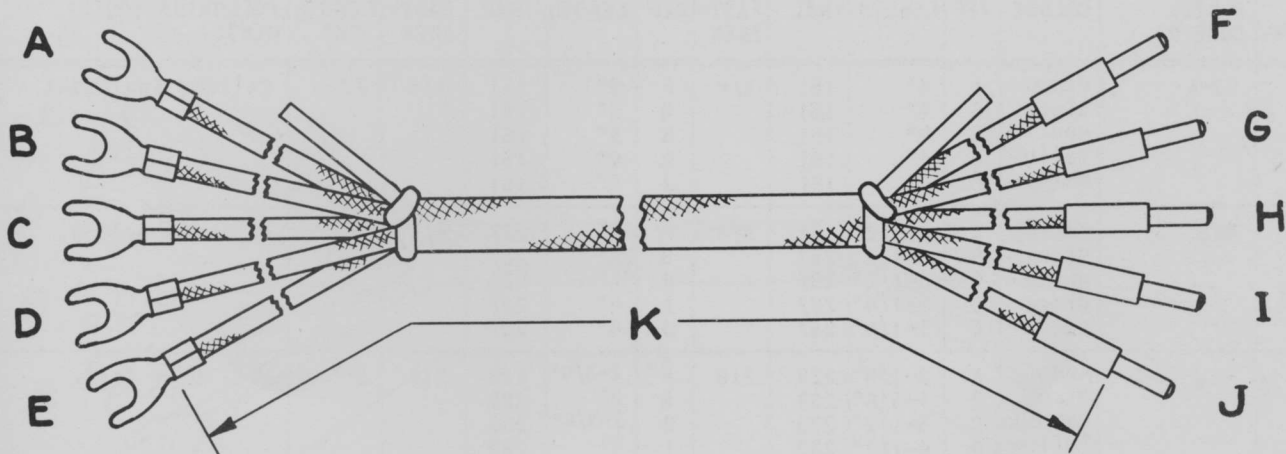
NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	TRACER COLOR	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	CORD LENGTH "I"	TO BE USED ON THE FOLLOWING EQUIPMENT:
4D04	383	Brown Red Yellow Green	A B C D	4" 4" 4" 4"	237 237 237 237	s/c	E F G H	6-1/2" 6-1/2" 6-1/2" 6-1/2"	237 237 237 237	s/c	72"	Kellogg 710, 730 900 & 925 Masterphones.
4D05	382	Green Red Blue Yellow	A B C D	7" 7" 7" 7"	238 238 238 238	210	E F G H	4-1/2" 4-1/2" 4-1/2" 4-1/2"	238 238 238 238	s/c	78"	S.C. 1182, 1198, 1198A, & 1208 Telephones.
4D06	381	Green Red Blue Yellow	A B C D	7" 7" 7" 7"	238 238 238 238	210	E F G H	7" 7" 7" 7"	238 238 238 238	210	63"	S.C. 1197A & 1198-MA Handset Telephones
4D07	402	Red Green Yellow Blue	A B C D	6" 6" 6" 6"	233 233 233 233	210	E F G H	1-3/8" 2-3/8" 1-3/8" 1-7/8"	233 233 233 233	210	66"	W.E. 1020E Transmitter Arm, 1042BR and Other Deskstands
4D08	40 & 384-RC	Red Green Yellow Blue	A B C D	1-5/8" 4-1/2" 1-5/8" 3"	233 233 233 233	s/c	E F G H	6" 6" 6" 6"	233 233 233 233	s/c	66"	W.E. Deskstands & Transmitter Arms
4D09	351-RC	Dble Yel White Yellow Green	A B C D	12" 2-3/4" 1-3/8" 1-3/8"	157 233 233 233	210	E F G H	6" 6" 6" 6"	233 233 233 233	210	66"	W.E. 20AH and 40AH Deskstands,
4D10	352, 694-RC, & 353	Red Yellow Black Green	A B C D	7-3/4" 6-1/2" 6-3/4" 5-1/4"	233 233 233 233	210	E F G H	6" 6" 6" 6"	233 233 233 233	210	66"	W.E. D1, D7 & D8 Type Handset Mountings & with 120AL, 140AL, 151AL & 152AB Deskstands.
4D11	41 & 42	Brown Black Red Yellow	A B C D	2" 2" 2" 2"	151 151 151 151	s/c	E F G H	4" 4" 4" 4"	237 237 237 237	s/c	72"	Kellogg Stands & Monarch Magneto Stands
4D12	41A	Brown Black Red Yellow	A B C D	4" 4" 4" 4"	151 151 151 151	s/c	E F G H	2" 2" 2" 2"	151 151 151 151	s/c	72"	Kellogg Equipment
4D13	41-AA	Green Red Blue Yellow	A B C D	4-1/2" 4-1/2" 4-1/2" 4-1/2"	151 151 151 151	s/c	E F G H	4-1/2" 4-1/2" 4-1/2" 4-1/2"	151 151 151 151	s/c	72"	Garford Type Desk Telephones
4D14	47	White Yellow Green Red	A B C D	2" 2" 9" 9"	TL1/4" TL1/4" TL1/4" TL1/4"	s/c	E F G H	2" 2" 2" 2"	151 151 151 151	s/c	60"	-

TL-TINSEL LOOP

* BODY LENGTH

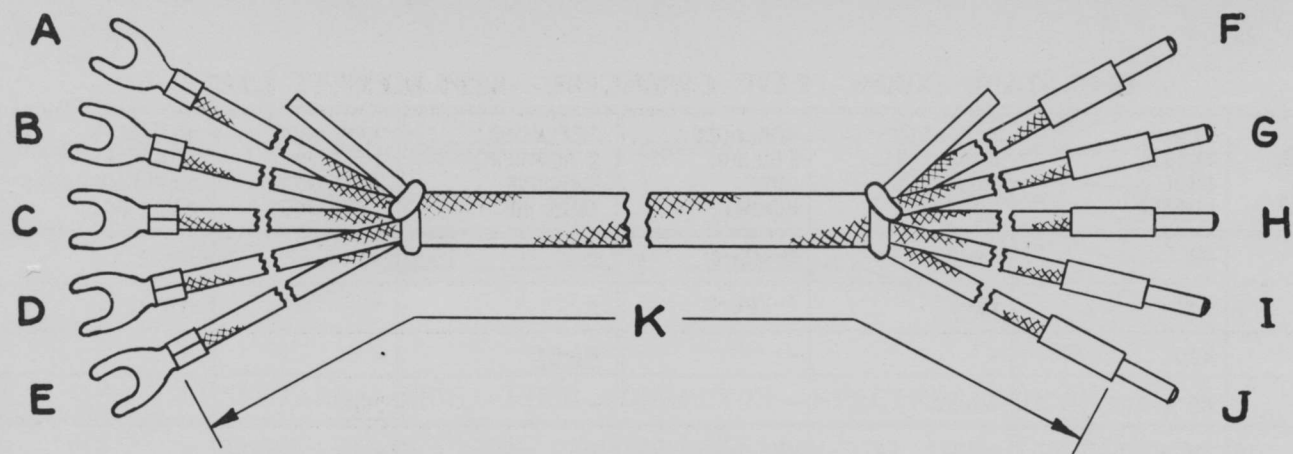
DESKSTAND CORDS--FIVE CONDUCTOR--REPLACEMENT LIST

NEW RUNZEL CODE NUMBER	OLD RUNZEL CODE NUMBER	REPLACES AUTOMATIC ELECTRIC CODE NO.	REPLACES KELLOGG CODE NUMBER	REPLACES STROMBERG-CARLSON CODE NO.	REPLACES WESTERN ELECTRIC CODE NO.	REPLACES OTHER MANUFACTURERS CODE NOS.
5D01	43	AD-31	F-103-D	-	-	-
5D02	431	AD-11	F-720-D	-	-	-
5D03	430	-	-	MD-5C	-	-
5D04	45 & 432	AD-51	-	-	D5J	-
5D05	44	-	488-D	-	-	-
5D06	43-A	AD-30	103-D	-	-	-
5D07	433	-	-	-	*	*For use on W.E. 501 Sub-Set
5D08	-	-	-	-	D5R	-



DESKSTAND CORDS--FIVE CONDUCTOR--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	TRACER COLORS	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	CORD LENGTH "K"	TO BE USED ON THE FOLLOWING EQUIPMENT:
5D01	43	Brown Black Red Yellow White	A B C D E	4" 4" 4" 4" 4"	237 237 237 237 237	s/c	F G H I J	2" 2" 2" 2" 2"	237 237 237 237 237	s/c	72"	Intercommunicating Systems.
5D02	431	Red Yellow Brown Black Blue	A B C D E	5" 5" 5" 5" 5"	237 237 237 237 237	s/c	F G H I J	3" 3" 3" 3" 3"	237 237 237 237 237	s/c	72"	A.E. Equipment
5D03	430	Yellow Red Green Black Blue	A B C D E	4-1/2" 4-1/2" 4-1/2" 4-1/2" 4-1/2"	238 238 238 238 238	s/c	F G H I J	4-1/2" 4-1/2" 4-1/2" 4-1/2" 4-1/2"	238 238 238 238 238	s/c	72"	S.C. 990, 1128-B, 1128-C, 1169, 1175, 1176, 1179-1, 1183 & 1189 Telephones
5D04	45 & 432	Green Blue DbI Red Red Yellow	A B C D E	3-1/2" 6-1/2" 7" 8" 5-3/4"	233 233 233 233 233	219	F G H I J	6" 6" 6" 6" 6"	233 233 233 233 233	219	66"*	W.E. D2, D3 & Similar Type Handset Mountings also 40CN, 51R & 51CN Deskstands.
5D05	44	Brown Black Red Yellow White	A B C D E	2" 2" 2" 2" 2"	151 151 151 151 151	s/c	F G H I J	4" 4" 4" 4" 4"	167 167 167 167 167	s/c	72"	Kellogg Equipment



DESKSTAND CORDS--FIVE CONDUCTOR--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	TRACER COLORS	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	CORD LENGTH "K"	TO BE USED ON THE FOLLOWING EQUIPMENT:
5D06	43-A	Brown Black Red Yellow White	A B C D E	4" 4" 4" 4" 4"	151 151 151 151 151	s/c	F G H I J	2" 2" 2" 2" 2"	151 151 151 151 151	s/c	72"	Kellogg Equipment.
5D07	433	Yellow Brown White Green Red	A B C D E	10-1/2" 3-1/2" 3-1/2" 1-1/4" 1-1/4"	181 237 237 237 237	s/c	F G H I J	4" 4" 4" 4" 4"	237 237 237 237 237	s/c	96"*	W. E. Sub-set 501
5D08	-	Red Blue Dbl Blue Yellow Black	A B C D E	3-1/4" 1-5/8" 5-1/2" 4-1/2" 5"	233 233 233 233 233	219	F G H I J	2-3/4" 2" 2-3/4" 4" 12"	233 233 233 233 152A-ins.	219	9"*	W. E. Dial Cord.

*BODY LENGTH

YOU ORDER IT . . . WE'LL MAKE IT

No matter how exacting your requirements . . . or how difficult the problem . . . when you're in need of telephone or switchboard cord of any type and for any service RUNZEL can supply your need to your utmost satisfaction.

RUNZEL engineers are constantly reaching out . . . exploring new horizons . . . developing new and better cords for the industry. For example: the new, tough, NYLON switchboard cords recently introduced by us. You came to us with your problem . . . told us what you had to have . . . then our research engineers went to work and produced . . . not just a cord to do the job, but the best possible cord to meet your requirements.

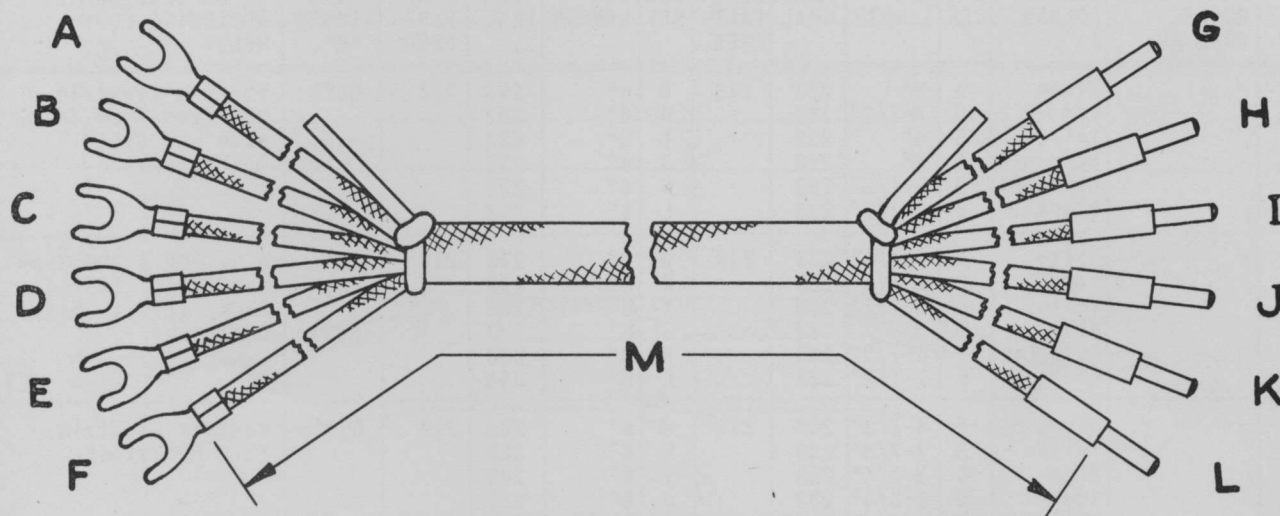
You can always be confident you're buying the finest when you specify RUNZEL cords . . . RUNZEL specializes in cord and wire for the Telephone Industry. All our efforts and facilities are directed to one objective . . . to provide serviceable products of outstanding quality.

You, our customers deserve much of the credit for the development and perfection of RUNZEL products . . . Your high standard of acceptance . . . your alert cooperation and response to our effort has spurred us on to new ideas and greater developments.

We repay you for your confidence with this thought . . . YOU CAN RELY ON RUNZEL.

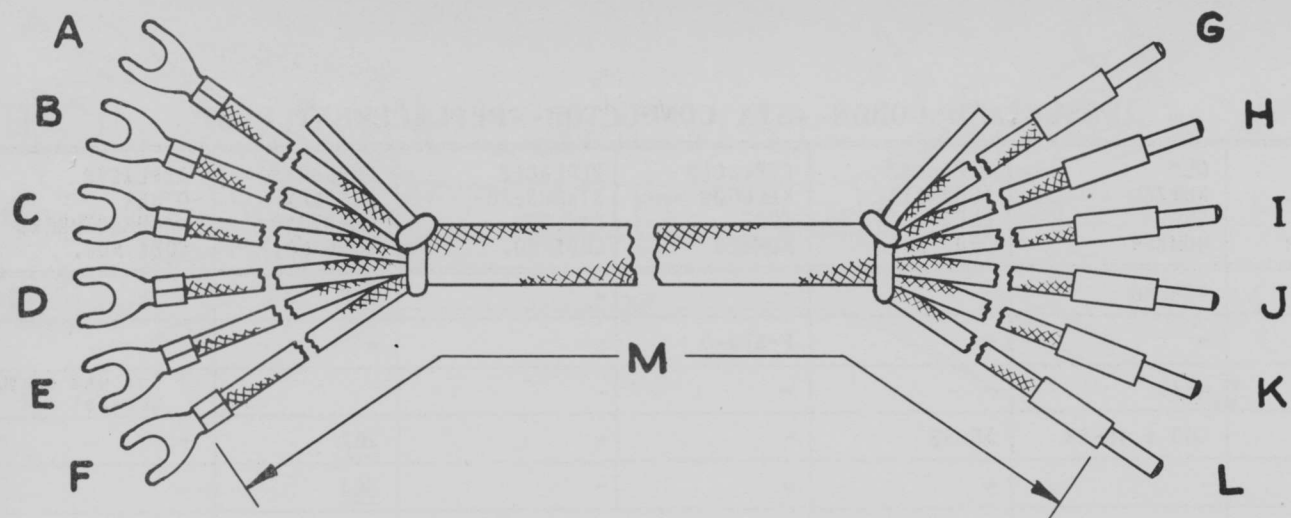
DESKSTAND CORDS--SIX CONDUCTOR--REPLACEMENT LIST

NEW RUNZEL CODE NUMBER	OLD RUNZEL CODE NUMBER	REPLACES AUTOMATIC ELECTRIC CODE NO.	REPLACES KELLOGG CODE NUMBER	REPLACES STROMBERG-CARLSON CODE NO.	REPLACES WESTERN ELECTRIC CODE NO.	REPLACES OTHER MANUFACTURERS CODE NOS.
6D01	466-RC	-	-	-	D6P	-
6D02	-	-	F-679-D	-	-	-
6D03	467	-	-	-	*	* For use on W.E. Sub-set
6D04	460 & 46-RR	AD-53	-	-	287	-
6D05	-	-	-	-	D6J	-
6D06	-	-	-	-	D6L	-
6D07	-	-	-	-	D6M	-



DESKSTAND CORDS--SIX CONDUCTOR--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	TRACER COLOR	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	CORD LENGTH "M"	TO BE USED ON THE FOLLOWING EQUIPMENT:
6D01	466-RC	Red Green Yellow Black Blue White	A B C D E F	4-3/4" 4-1/4" 3" 3" 3-3/4" 4"	233 233 233 233 233 233	219	G H I J K L	3-1/2" 3-1/2" 3-1/2" 3-1/2" 3-1/2" 3-1/2"	233 233 233 233 233 233	219	66"	Western Electric Equipment.
6D02	-	Green Black Red Yellow White Blue	A B C D E F	6-1/2" 6-1/2" 6-1/2" 6-1/2" 6-1/2" 6-1/2"	237 237 237 237 237 237	s/c	G H I J K L	4" 4" 4" 4" 4" 4"	237 237 237 237 237 237	s/c	72"	Kellogg Equipment.
6D03	467	Red Green White Brown Yellow Blue	A B C D E F	1-1/2" 1-1/2" 3" 3" 10" 10"	233 233 233 233 233 233	-	G H I J K L	4" 4" 4" 4" 4" 4"	233 233 233 233 233 233	-	96"	Western Electric Sub-set.
6D04	460 & 46-RR	Green Red Yellow Blue Dbl. Red White	A B C D E F	1-1/4" 1-1/4" 2-3/4" 1-5/8" 4-1/2" 2-1/2"	233 233 233 233 233 233	s/c	G H I J K L	6" 6" 6" 6" 6" 6"	233 233 233 233 233 233	s/c	66"	Western Electric 40-S Transmitter Arm.



DESKSTAND CORDS--SIX CONDUCTOR--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	TRACER COLORS	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	CORD LENGTH "M"	TO BE USED ON THE FOLLOWING EQUIPMENT:
6D05	-	Green Red Yellow Dble Yel Dble Red Black	A B C D E F	3" 7-1/2" 6" 6" 6-1/2" 6-1/2"	233 233 233 233 233 233	219	G H I J K L	6" 6" 6" 6" 6" 6"	233 233 233 233 233 233	219	66"*	Western Electric 203 Type Hand Telo. Sets and #151C Deskstand.
6D06	-	White Green Yellow Blue Dble Red Red	A B C D E F	3-1/4" 7-1/2" 6-1/2" 6" 6-1/2" 7-1/2"	233 233 233 233 233 233	219	G H I J K L	6" 6" 6" 6" 6" 6"	233 233 233 233 233 233	219	66"*	W.E. 206 & 207 Type Hand Telo. Sets & 50CN, 151S & 151AL Deskstand.
6D07	-	Black Yellow Blue Red Dble Red Green	A B C D E F	4-1/2" 2-7/8" 3-3/4" 2-3/4" 4-1/4" 1-1/2"	233 233 233 233 233 233	219	G H I J K L	6" 6" 6" 6" 6" 6"	233 233 233 233 233 233	219	66"*	Western Electric 151R Deskstand.

*BODY LENGTH



SECTION OF CORD FINISHING DEPARTMENT

OUR CORD FINISHING DEPARTMENT EMPLOYS HUNDREDS OF SKILLED WORKERS WHOSE ADEPTNESS FOR CAREFUL WORKMANSHIP QUALIFIED THEM FOR THIS DEPARTMENT. THESE WOMEN FOLLOW A RIGID STANDARD OF QUALITY. FREQUENT INSPECTIONS FURTHER ASSURE A CONSISTENT HIGH GRADE FINISH FOR ALL RUNZEL CORDS.

THE REPUTATION RUNZEL CORDS HAVE GAINED THROUGHOUT THE COMMUNICATIONS FIELD HAS BEEN EARNED BY SUCH DILIGENCE AS IS REFLECTED IN THIS DEPARTMENT. EVERY CORD MUST MEET RUNZEL STANDARD OF QUALITY BEFORE IT LEAVES THE FACTORY.

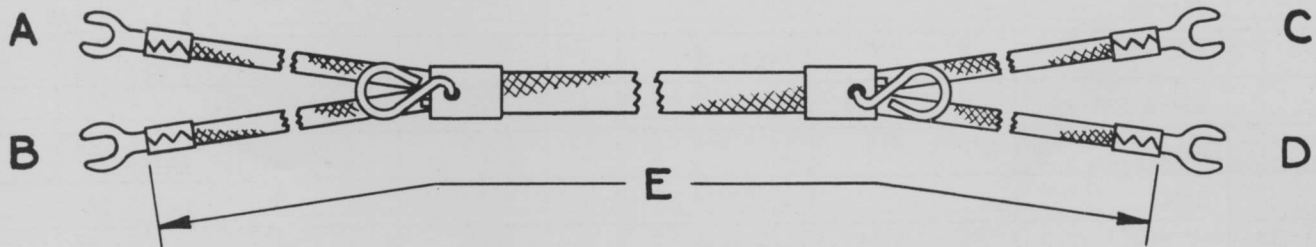
Runzel

HANDSET CORDS



HANDSET CORDS--TWO CONDUCTOR--REPLACEMENT LIST

NEW RUNZEL CODE NUMBER	OLD RUNZEL CODE NUMBER	REPLACES AUTOMATIC ELECTRIC CODE NO.	REPLACES KELLOGG CODE NUMBER	REPLACES STROMBERG-CARLSON CODE NO.	REPLACES WESTERN ELECTRIC CODE NO.	REPLACES OTHER MANUFACTURERS CODE NOS.
2H01	652	-	-	MC-2C	-	-
2H02	654	AH-14	-	MC-2B	-	-
2H03	671	-	-	MC-2G	-	-
2H04	653	-	-	MC-2F	-	-
2H05	35-L	-	-	-	-	Leich 35
2H06	38-L	-	-	-	-	Leich 38
2H07	-	AH-26	-	-	-	-



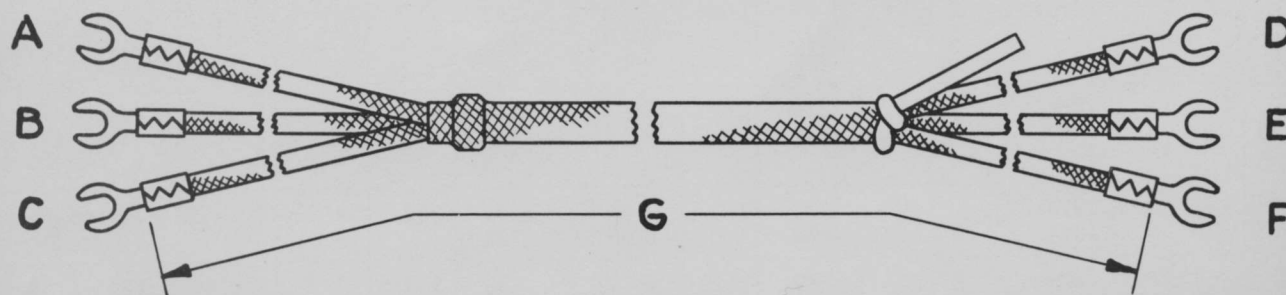
HANDSET CORDS--TWO CONDUCTOR--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	TRACER COLORS	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	CORD LENGTH "E"	TO BE USED ON THE FOLLOWING EQUIPMENT:
2H01	652	Green Red	A B	1" 1"	208 208	Loop	C D	4" 4"	203 203	s/c	72"	S.C. 11-C, 11-D, 11-E, 19, 19-C & 19-D Handsets.
2H02	654	Green Red	A B	2" 2"	238 238	s/c	C D	3" 3"	238 238	s/c	48"	S.C. 10PC, 10-D, 10-S, 14, 1181-A, B, D, DJ, & E Handset.
2H03	671	Green Red	A B	2" 2"	239 239	212	C D	4" 4"	238 238	212	54"	S.C. 22 Handset.
2H04	653	Green Red	A B	2" 2"	239 239	212	C D	7" 7"	238 238	212	57"	S.C. 17, 1201-A, B, D, DJ & E Telephones.
2H05	35-L	Yellow Red	A B	3" 3"	237 237	212	C D	1-3/4" 2-3/16"	237 237	212	63"*	Leich Handset
2H06	38-L	Yellow Green	A B	2" 2"	152A 152A	174	C D	3" 2"	237 237	212	42"*	Leich Handset
2H07	-	Brown Red	A B	3" 3"	233 233	s/c	C D	11" 3"	233 237	222	62"	A.E. Handset

* BODY LENGTH

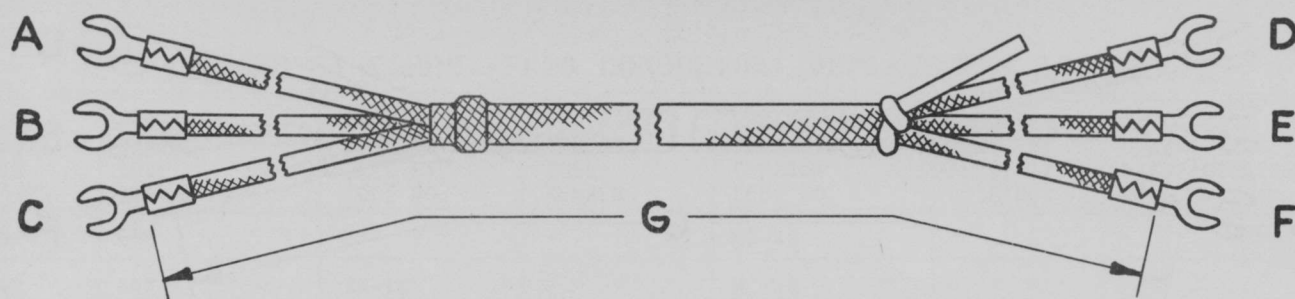
HANDSET CORDS--THREE CONDUCTOR--REPLACEMENT LIST

NEW RUNZEL CODE NUMBER	OLD RUNZEL CODE NUMBER	REPLACES AUTOMATIC ELECTRIC CODE NO.	REPLACES KELLOGG CODE NUMBER	REPLACES STROMBERG-CARLSON CODE NO.	REPLACES WESTERN ELECTRIC CODE NO.	REPLACES OTHER MANUFACTURERS CODE NOS.
3H01	672	-	-	<u>MC-3G</u>	-	-
3H02	655-RC & 655	-	<u>F-688-G</u> <u>F-621-G</u>	-	-	-
3H03	650	-	F-704-G	<u>MC-3B</u>	-	-
3H04	65 & 65-RC	AH-13 -	<u>F-673-G</u> <u>F-723-G</u>	-	-	-
3H05	651	-	F-738-G	<u>MC-3F</u>	-	-
3H06	670, 670-RC, & 678	<u>AH-27</u>	F-733-G	-	-	-
3H07	663, 669-WP, 656, 165-G & M-32	<u>AH-11</u>	F-690-G	-	-	-
3H08	659-RC	-	-	-	-	<u>N.E. F-1202</u>
3H09	681-RC	-	-	-	<u>H3K</u>	-
3H10	168-RC	AH-16	F-729-G	-	<u>H3C</u>	-
3H11	682-RC	-	-	-	<u>H3T</u>	-
3H12	661-RC	-	-	-	-	<u>N.E. NH3-A9</u>
3H13	-	-	<u>F-664-G</u>	-	-	-
3H14	668 & 668-RR	-	-	-	<u>H3M</u>	-
3H15	34-L	-	-	-	-	<u>Leich 34</u>
3H16	36-L	-	-	-	-	<u>Leich 36</u>
3H17	-	-	<u>770-MFP</u>	-	-	-
3H18	-	-	<u>769-MFP</u>	-	-	-
3H19	52-L	-	-	-	-	<u>Leich 52</u>



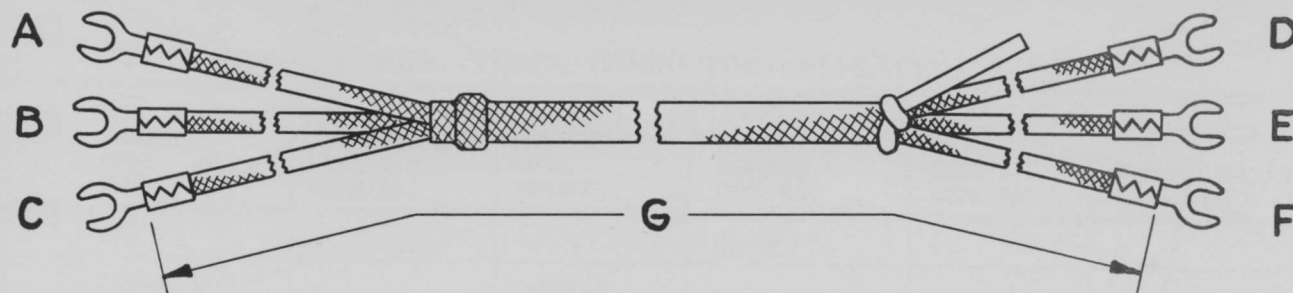
HANDSET CORDS--THREE CONDUCTOR--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	TRACER COLORS	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	CORD LENGTH "G"	TO BE USED ON THE FOLLOWING EQUIPMENT:
3H01	672	Green Red Yellow	A B C	2" 2" 2"	239 239 239	210	D E F	4" 4" 4"	238 238 238	210	54"	S.C. 20 Handset
3H02	655-RC & 655	Red Green Yellow	A B C	4" 4" 4"	237 237 237	s/c	D E F	2" 2" 2"	239 239 239	s/c	36" 72"	Kellogg 32-C Handset. (Waterproof cord length) Kellogg 22-C Handset (Moistureproof cord length)



HANDSET CORDS--THREE CONDUCTOR--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	TRACER COLORS	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	CORD LENGTH "G"	TO BE USED ON THE FOLLOWING EQUIPMENT:
3H03	650	Green Red Yellow	A B C	2" 2" 2"	208 208 208	s/c	D E F	4-1/2" 4-1/2" 4-1/2"	208 208 208	s/c	48"	S.C. 10, 12, & 19-L Handset.
3H04	65 & 65-RC	Red Yellow Green	A B C	1" 1" 1"	237 237 237	3 rubber grommet	D E F	6-1/2" 6-1/2" 6-1/2"	237 237 237	s/c	48"	Kellogg F-27-C & F-27-EC Handset used with 4900 series weatherproof telos.
3H05	651	Green Red Yellow	A B C	2" 2" 2"	239 239 239	210	D E F	7" 7" 7"	238 238 238	210	57"	S.C. 15, 1201-C, CA, 1191-B, 1195, 1197, 1197A, 1202, 1210A, 1211M, 1212AD, 1215 & 1216 Handsets.
3H06	670, 670-RC & 678	Red Yellow Brown	A B C	1-15/16" 1-5/8" 1-15/16"	237 237 237	230	D E F	3" 2-1/2" 2"	237 237 237	s/c	53"	A.E. Type 41 Monophone.
3H07	663, 669-WP, 656 & 165-G	Red Brown Yellow	A B C	1-5/8" 2" 2"	237 237 237	222	D E F	3" 3" 3"	237 237 237	s/c	53"	A.E. Equipment.
3H08	659-RC	Red Black White	A B C	1" 1-1/4" 1-1/4"	233 233 233	193	D E F	3-3/4" 2-5/8" 2-1/4"	233 233 233	210	49-1/2"	Northern Elec. Equipment and Western Elec. Equipment.
3H09	681-RC	Yellow Red Green	A B C	3" 3" 3"	237 237 237	s/c	D E F	2-3/4" 3-1/4" 3-1/2"	233 233 233	Loop	72"	W.E. 1001H Handset.
3H10	168-RC	Red White Black	A B C	6" 7-1/2" 6-1/2"	233 233 233	210	D E F	1-1/8" 1-1/8" 1-1/4"	233 233 233	193	48"	W.E. E1B, E1D, E1E & F1A Handsets.
3H11	682-Rc	Black Red White	A B C	1-1/4" 1-1/8" 1-1/8"	233 233 233	193	D E F	6-3/4" 6-5/8" 7-3/4"	233 233 233	210	66"	W.E. F3CW3, F3DW3 & 1332A Portable Handset; F2DW3 Handset & 211E-3 Deskstand; F3DW3 Handset & 1417S Wall Phone.
3H12	661-RC	Black Red White	A B C	8" 6-1/2" 8-3/8"	233 233 233	193	D E F	1-11/16" 1-1/4" 1-1/4"	233 233 233	193	48"	Northern & Western Electric Equipment.
3H13	-	Green Yellow Red	A B C	1-5/8" 4-1/8" 1-5/8"	TL TL TL	s/c	D E F	3" 3" 3"	175 175 175	s/c	43"	Kellogg 19-L Handset
3H14	668 & 668-RR	Red Green Yellow	A B C	1-1/2" 7-1/4" 7"	152A TL 1/8" 152A	s/c	D E F	6" 6" 6"	233 233 233	s/c	48"	W.E. 1002AC Handset
3H15	34-L	Green Red Yellow	A B C	2" 2" 2"	152A 152A 152A	174	D E F	2-3/16" 2-5/8" 3-1/16"	237 237 237	210	42"	Leich #90-A Handset. (Handset to Base)
3H16	36-L	Red Yellow Green	A B C	3" 3" 3"	237 237 237	210	D E F	1-3/4" 2-3/16" 2-5/8"	237 237 237	210	63"	Leich #90-A Handset. (Base to Terminal Block)
3H17	-	Red White Black	A B C	1" 1" 1"	233 233 233	193	D E F	1-1/2" 1-1/2" 1-1/2"	233 233 233	193	48"	Kellogg #1000 Master-phone. (Handset Cord)

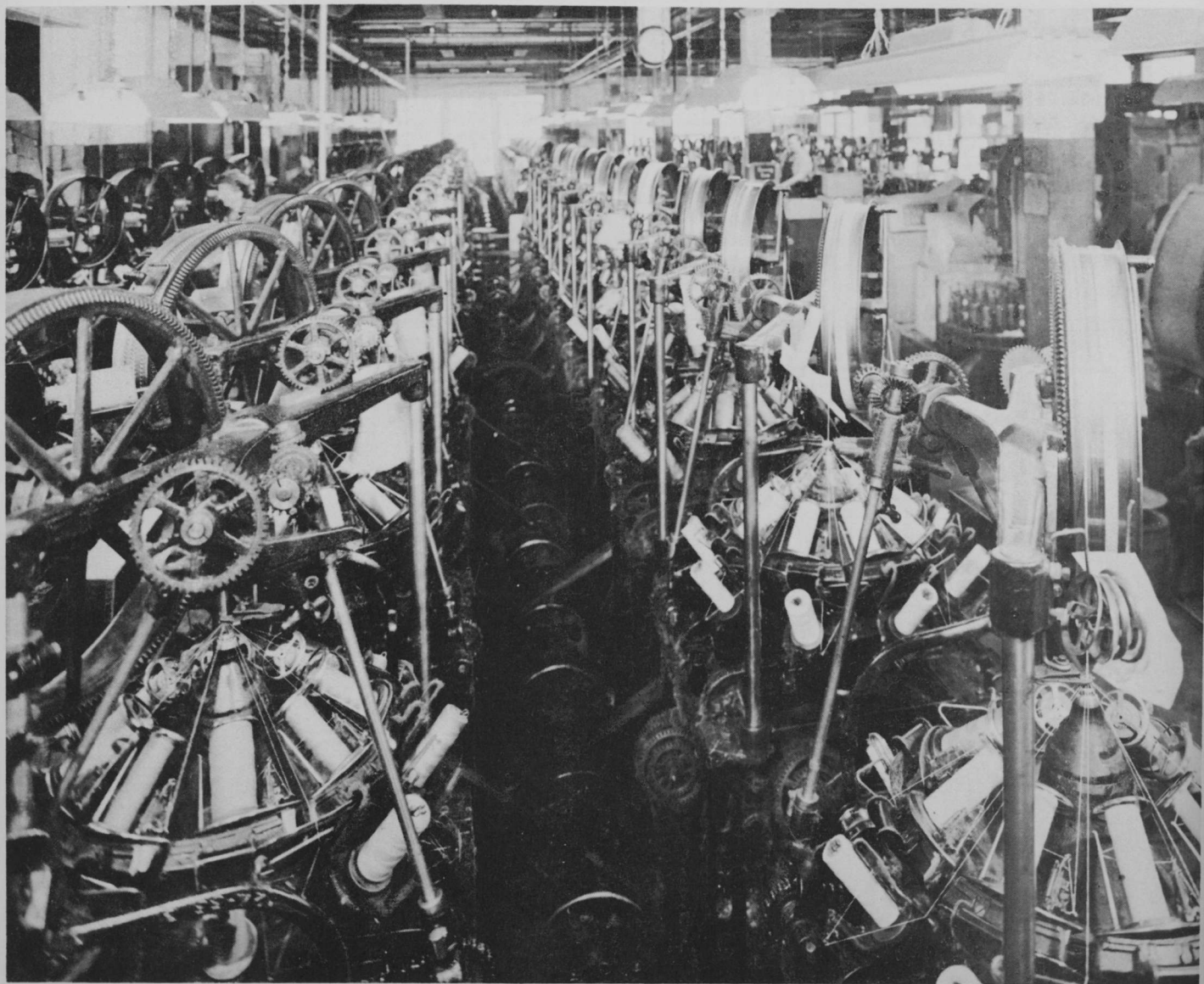


HANDSET CORDS--THREE CONDUCTOR--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	TRACER COLORS	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	CORD LENGTH "G"	TO BE USED ON THE FOLLOWING EQUIPMENT. MENT:
3H18	-	Red White Black	A B C	1-3/4" 1-3/4" 1-3/4"	233 233 233	193	D E F	1-1/4" 1-1/4" 1-1/4"	233 233 233	229	72"	Kellogg #1000 Masterphone. (Line Cord)
3H19	52-L	Green Red Yellow	A B C	1-1/2" 1-1/2" 1-1/2"	152A 152A 152A	3 rubber grommet	D E F	2-3/16" 2-5/8" 3-1/16"	237 237 237	210	42"*	Leich 100 Handset Unit; 86A Magneto Handset Telos. and other Magneto Telos.

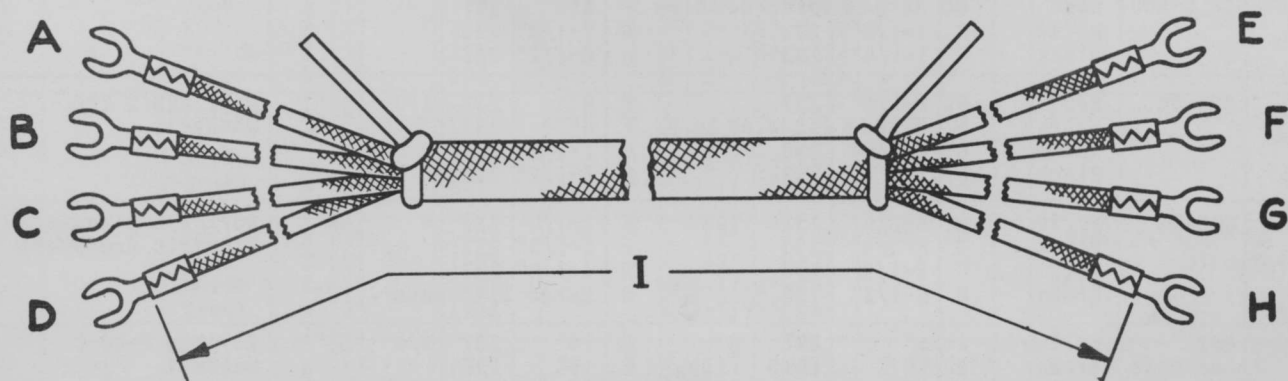
* BODY LENGTH

BATTERY OF AUTOMATIC BRAIDING MACHINES



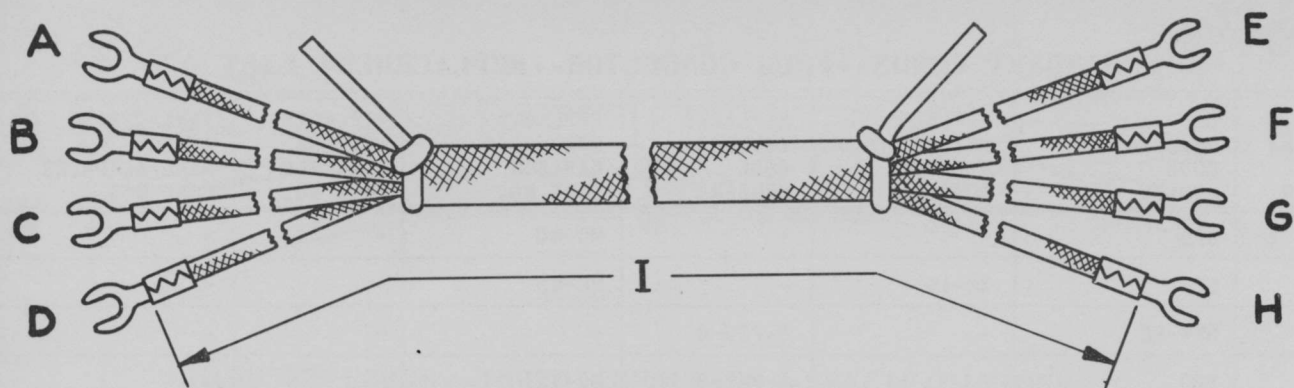
HANDSET CORDS--FOUR CONDUCTOR--REPLACEMENT LIST

NEW RUNZEL CODE NUMBER	OLD RUNZEL CODE NUMBER	REPLACES AUTOMATIC ELECTRIC CODE NO.	REPLACES KELLOGG CODE NUMBER	REPLACES STROMBERG-CARLSON CODE NO.	REPLACES WESTERN ELECTRIC CODE NO.	REPLACES OTHER MANUFACTURERS CODE NOS.
4H01	673	-	-	MC-4G	-	-
4H02	667	AH-15	-	MC-4B	-	-
4H03	674-RC	-	F-735-G	-	-	-
4H04	660	-	F-742-G	MC-4F	-	-
4H05	666	AH-10	F-699-GA	-	-	-
4H06	685	-	-	-	H4J	-
4H07	680-RC	-	-	-	H4S	-
4H08	675-RC	-	-	-	H4T	-
4H09	684-RC	-	-	-	H4L	-
4H10	683-RC	-	-	-	-	N.E. NH4A-9
4H11	662	-	F-699-G	-	-	-
4H12	664	-	F-717-G	-	-	-
4H13	665	-	F-718-G	-	-	-
4H14	-	-	F-734-G	-	-	-
4H15	66	AH-12	F-454-G	-	-	-
4H16	-	-	-	-	H4U	-
4H17	-	-	-	-	H4F	-
4H18	-	-	-	-	H4M	-
4H19	-	-	-	-	H4P	-
4H20	33-L	-	-	-	-	Leich 33
4H21	39-L	-	-	-	-	Leich 39
4H22	54-L	-	-	-	-	Leich 54
4H23	-	-	-	-	-	Runzel Original



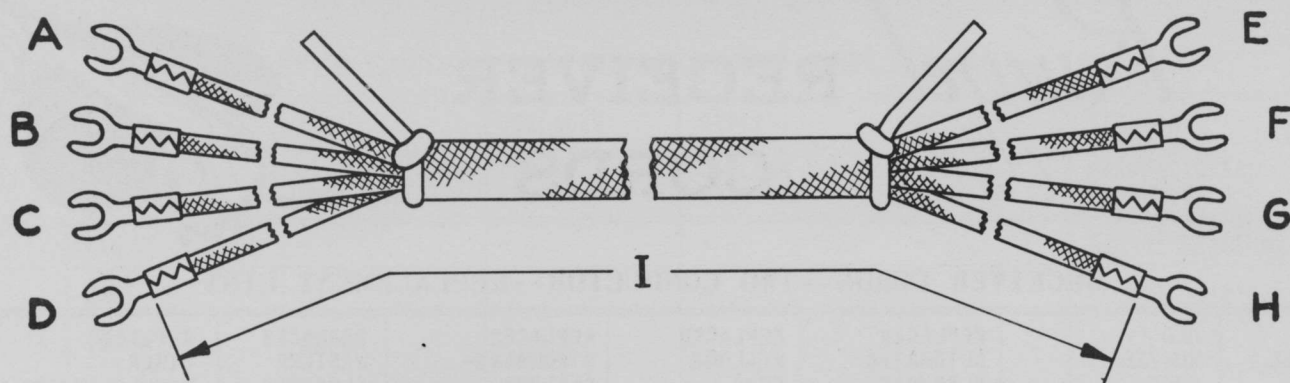
HANDSET CORDS--FOUR CONDUCTOR--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	TRACER COLORS	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	CORD LENGTH "i"	TO BE USED ON THE FOLLOWING EQUIPMENT:
4H01	673	Green Red Yellow Blue	A B C D	2" 2" 2" 2"	239 239 239 239	210	E F G H	4" 4" 4" 4"	238 238 238 238	210	54"	S.C. 21 Handset



HANDSET CORDS--FOUR CONDUCTOR--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	TRACER COLORS	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	CORD LENGTH "i"	TO BE USED ON THE FOLLOWING EQUIPMENT:
4H02	667	Green Red Yellow Blue	A B C D	2" 2" 2" 2"	238 238 238 238	s/c	E F G H	4-1/2" 4-1/2" 4-1/2" 4-1/2"	238 238 238 238	s/c	48"	S.C. 10 & 13 Handsets
4H03	674-RC	Brown Yellow Red Green	A B C D	1" 1" 1" 1"	237 237 237 237	3 rubber grommet	E F G H	6-1/2" 6-1/2" 6-1/2" 6-1/2"	237 237 237 237	s/c	48"	Kellogg 44-C Handset
4H04	660	Green Red Yellow Blue	A B C D	2" 2" 2" 2"	239 239 239 239	210	E F G H	7" 7" 7" 7"	238 238 238 238	210	57"	S.C. 16, 1192, 1193, 1198, 1198A, & 1207 Handsets
4H05	666	Red Yellow Brown Black	A B C D	2" 2" 1-5/8" 1-5/8"	237 237 237 237	222	E F G H	3" 3" 3" 3"	237 237 237 237	s/c	53"	A.E. Equipment
4H06	685-RC	Red Green White Black	A B C D	1-1/8" Bared under... 1-1/8" 1-1/4"	233 218 233 233		E F G H	6" 6" 6" 5-1/2"	233 233 233 233	s/c	48"	W.E. E3A Handset... This cord furnished with brown cotton overall braid & rubber insulated conductors.
4H07	680-RC	Red Yellow Green Blue	A B C D	3" 3" 3" 3"	233 233 233 233	s/c	E F G H	5-1/2" 2-3/4" 2-1/4" 3-1/4"	233 233 233 233	s/c	72"	W.E. 1001-J Handset
4H08	675-RC	Green Red White Black	A B C D	1-1/8" Bared & soldered to 193 1-1/8" 1-1/4"	233 193 233 233		E F G H	6" 6" 7-1/2" 6-1/2"	233 233 233 233	210	48"	W.E. F2B Handsets
4H09	684-RC	Red Green White Black	A B C D	1-1/8" Bared & soldered to 193 1-1/8" 1-1/4"	233 193 233 233		E F G H	6" 6" 7-1/2" 6-1/2"	233 233 233 233	210	48"	W.E. E2B & E2C Handsets
4H10	683-RC	White Black Red Green	A B C D	8-3/4" 8-3/4" 8-1/4" 6-1/2"	233 233 233 233	193	E F G H	1-1/4" 1-5/8" 1-1/4" Bared 3/4"	233 233 233 under.. 193	-	49"	Northern & Western Electric Equipment
4H11	662	Yellow Brown Red Green	A B C D	1" 4" 1" 1"	237 194B 237 237	3 rubber grommet	E F G H	10" 10" 6-1/2" 6-1/2"	237 237 237 237	s/c	55"	Kellogg F-40-C Handset
4H12	664	Yellow Brown Red Green	A B C D	1" 4" 1" 1"	237 194B 237 237	3 rubber grommet	E F G H	1-5/8" 1-5/8" 1-7/8" 1-7/8"	TL TL TL TL	s/c	46"	Kellogg 39 Handset & 182 plug
4H13	665	Yellow Red Brown Green	A B C D	1" 1" 4" 1"	237 237 194B 237	s/c & 3 rubber grommet	E F G H	2-9/16" 2-1/8" 2-9/16" 2-1/8"	158 158 158 158	s/c	46"	Kellogg 39 Handset & 139 plug

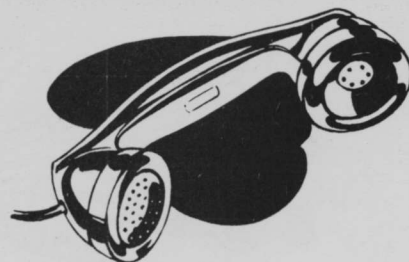


HANDSET CORDS--FOUR CONDUCTOR--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	TRACER COLORS	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	CORD LENGTH "i"	TO BE USED ON THE FOLLOWING EQUIPMENT
4H14	-	Yellow Brown Red Green	A B C D	1" 4" 1" 1"	237 194B 237 237	3 rubber grommet	E F G H	6-1/2" 6-1/2" 6-1/2" 6-1/2"	237 237 237 237	s/c	51-1/2"	Kellogg F-43-C Handset used in 5845 telephones
4H15	66	Red Yellow Brown Black	A B C D	4" 4" 4" 4"	237 237 237 237	s/c	E F G H	7" 7" 3" 3"	239 239 239 239	s/c	48"	Kellogg F-11 & F-12 Handset--Grabaphones
4H16	-	Green White Red Black	A B C D	2-5/8" 2-1/8" 2-1/8" 2-5/8"	194A) Rubber 210 194A) Tubing ins. 194A) Rubber 194A) Tubing		E G F H	1-1/8" 1-1/8" Bared under...193 1-1/4"	233 233 233		48"	W.E. F2A-3 Handset for use with plug one end
4H17	-	Red Yellow Green Blue	A B C D	6" 4" 5" 4"	233 233 233 233	210	E F G H	3" 2-1/2" 3-1/2" 2"	233 233 233 233	s/c	60"	W.E. Equipment
4H18		Black Red White Green	A B C D	2-21/32" 2-7/32" 2-21/32" 2-7/32"	158) Rubber 210 158) Tubing 158) Rubber 158) Tubing		H E G F	1-1/4" 1-1/8" 1-1/8" Bared under...193	233 233 233		48"	W.E. E2A-3 Handset arranged for 137 plug
4H19	-	Blue Red Yellow Green	A B C D	3" 3" 3" 3"	233 233 233 233	s/c	E F G H	2-1/2" 6-1/2" 1-3/8" 2"	152A TL 1/8" 152A 152A	s/c	54"	W.E. 1002-D Handset
4H20	33-L	Yellow Red White Green	A B C D	3" 3" 3" 3"	237 237 237 237	210	E F G H	1-3/4" 2-3/16" 2-5/8" 3-1/16"	237 237 237 237	210	63"	Leich Handset Connecting to Magneto Bell Box
4H21	39-L	Yellow Red White Green	A B C D	2" 2" 2" 2"	152A 152A 152A 152A	174	E F G H	12" 12" 3-1/16" 3-1/16"	237 237 151 151	210	54"	Leich 2A Magneto Handset Replacement Unit
4H22	54-L	Yellow Red White Green	A B C D	1-1/2" 1-1/2" 1-1/2" 1-1/2"	152A 152A 152A 152A	3 rubber grommet	E F G H	12" 12" 3-1/16" 3-1/16"	237 237 151 151	210	54"	Leich 3A Handset Conversion Unit
4H23	-	Yellow Red White Green	A B C D	3" 3" 3" 3"	211 211 211 211	s/c	E F G H	3" 3" 3" 3"	208 208 208 208	s/c	48"	Leich Equipment

Runzel

RECEIVER CORDS

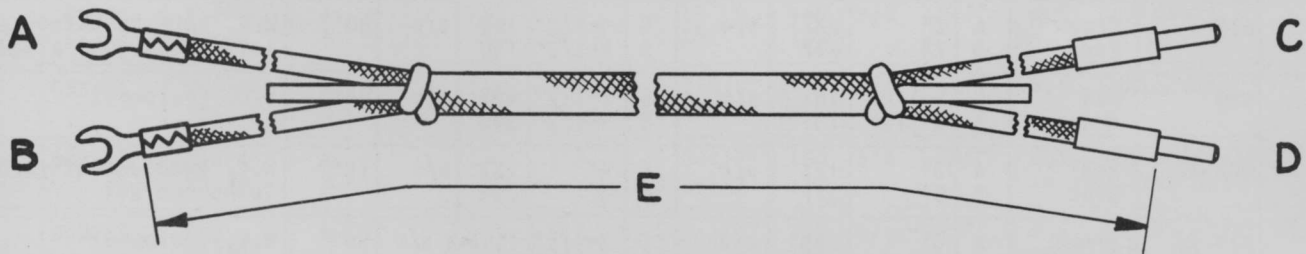


RECEIVER CORDS--TWO CONDUCTOR--REPLACEMENT LIST

NEW RUNZEL CODE NUMBER	OLD RUNZEL CODE NUMBER	REPLACES AUTOMATIC ELECTRIC CODE NO.	REPLACES KELLOGG CODE NUMBER	REPLACES STROMBERG- CARLSON CODE NO.	REPLACES WESTERN ELECTRIC CODE NO.	REPLACES OTHER MANUFACTURERS CODE NOS.
2R01	620	AR-12	F-644-RA	-	-	Amer.Elec. MC-5431
2R02	-	AR-33	-	-	-	-
2R03	(62 62-RC	AR-16 -	F-644-TR F-716-TR	- -	- -	Leich 11-C -
2R04	62-B	AR-14	-	-	-	-
2R05	62-J	AR-21	F-687-TR	MR-2G	-	-
2R06	628	-	-	MR-2J	-	-
2R07	625	-	-	-	R2BY	-
2R08	604-RC	-	-	-	R2CS	-
2R09	635	-	-	-	R2EM	-
2R10	619-RC & 162-RC	-	F-732-R	-	R2DW	-
2R11	623	AR-28	-	-	R2Y	-
2R12	624	AR-23	-	-	R2A	-
2R13	612 & 61-PB	AR-13	-	-	-	-
2R14	(51 611, & 61-MT	AR-17 AR-11	F-642-TR -	- -	- -	Leich 11-A Amer.Elec. MC-5430
2R15	617-RC	-	-	-	R2DC	-
2R16	615	AR-24	-	-	196	-
2R17	610	AR-22	-	MR-21	-	-
2R18	605-RC	-	-	-	357	-
2R19	614-RC	AR-29	-	-	R2CP	-
2R20	606-RC	-	-	-	R2BR	-
2R21	608-RC	-	-	-	R2BW	-
2R22	60 & 60-RC	AR-25	646-TR	-	R2CE	-
2R23	600-RC	-	-	-	R2H	-
2R24	607-RC	-	-	-	R2BS	-
2R25	613	AR-26	-	-	R2CL	-
2R26	621	-	682-TR	-	-	-
2R27	616-RC	-	-	-	R2CT	-
2R28	636	-	-	-	R2EA	-
2R29	622-RC	AR-27	-	-	R2DF	-

RECEIVER CORDS--TWO CONDUCTORS--REPLACEMENT LIST

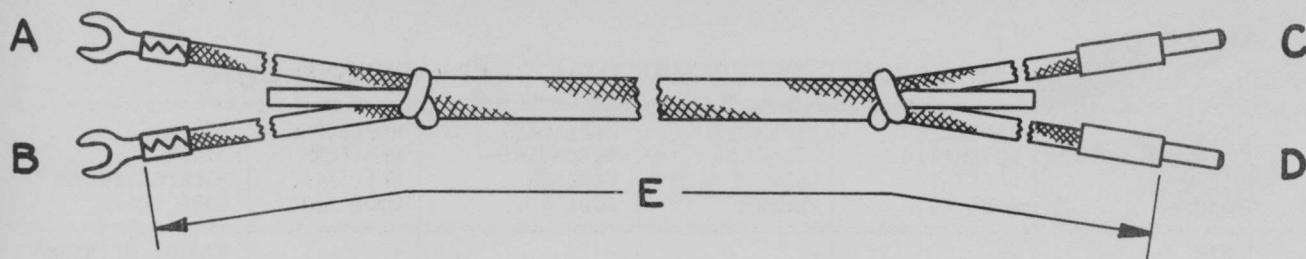
NEW RUNZEL CODE NUMBER	OLD RUNZEL CODE NUMBER	REPLACES AUTOMATIC ELECTRIC CODE NO.	REPLACES KELLOGG CODE NUMBER	REPLACES STROMBERG-CARLSON CODE NO.	REPLACES WESTERN ELECTRIC CODE NO.	REPLACES OTHER MANUFACTURERS CODE NOS.
2R30	629	-	-	-	-	Runzel Original
2R31	630	-	-	-	-	Runzel Original
2R32	(62-A 61-AD)	AR-18 -	644-TR -	- -	- -	Leich 11-B Chgo. Telo. Equip.
2R33	61-AB	AR-31	644-RA	-	-	Amer. Elec. MC-54201, MC-5429 & Monarch Equip.
2R34	61-AA & 61-A	AR-20	242	MR-2D	-	-
2R35	602-RC	-	-	-	R2CR	-
2R36	638-RC	-	-	-	R2CA	-
2R37	603-RC	-	-	-	R2CD	-
2R38	609-RC	-	-	-	R2CB	-
2R39	63	AR-19	-	MR-2B	-	-
2R40	627	-	-	MR-2H	-	-
2R41	637-WP	-	-	-	R2EH	-
2R42	63-A	-	-	-	-	Runzel Original
2R43	632	-	-	M-2-i	-	-



RECEIVER CORDS--TWO CONDUCTOR--SPECIFICATIONS

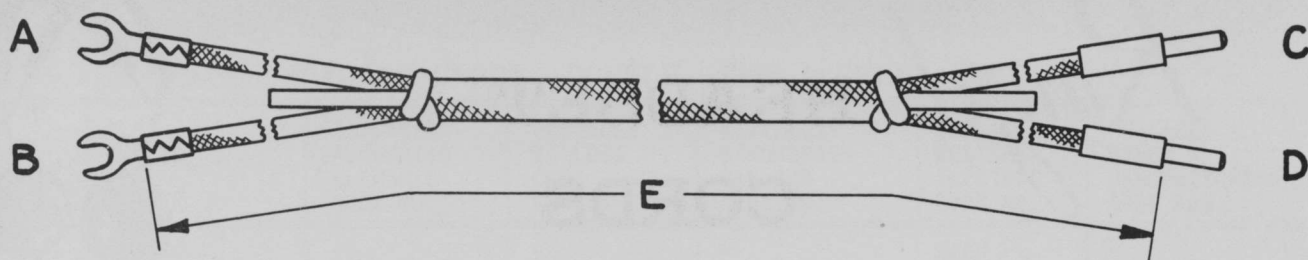
NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	TRACER COLORS	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	CORD LENGTH "E"	TO BE USED ON THE FOLLOWING EQUIPMENT:
2R01	620	Red Green	A B	2-5/8" 2-5/8"	237 237	s/c	C D	2-5/8" 2-5/8"	237 237	s/c	36"	Monarch Equipment & Amer. Electric.
2R02	-	Brown Red	A B	2-1/4" 2-1/4"	237 237	222	C D	3" 3"	237 237	s/c	33"	A.E. Type 42 Receiver.
2R03	62	Brown Black	A B	3-1/2" 3-1/2"	237 237	s/c	C D	2" 2"	237 237	s/c	36"	Kellogg F-41-A & F-41-B Receivers.
2R04	62-B	Brown Red	A B	3" 3"	237 237	s/c	C D	3" 3"	237 237	s/c	33"	A.E. 21 & 200 Desk & Wall Telephones
2R05	62-J	Red Green	A B	3-1/2" 3-1/2"	239 239	s/c	C D	3-1/2" 3-1/2"	239 239	s/c	36"	S.C. Equipment
2R06	628	Red Green	A B	5-1/2" 5-1/2"	239 239	s/c	C D	3-1/2" 3-1/2"	239 239	s/c	39"	S.C. Equipment
2R07	625-RC	Green White	A B	5-3/8" 5-3/8"	233 233	-	C D	2-1/4" 2-1/4"	233 233	s/c	12-1/2"*	W.E. 336 & 337 Subscriber Sets
2R08	604-RC	Green White	A B	5-3/8" 5-3/8"	233 233	-	C D	5" 5"	233 233	s/c	30"*	W.E. Concealed Binding Posts Receivers

*CORD LENGTH



RECEIVER CORDS--TWO CONDUCTOR--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	TRACER COLORS	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	CORD LENGTH "E"	TO BE USED ON THE FOLLOWING EQUIPMENT:
2R09	635	Green White	A B	1-3/4" 3-3/4"	233 233	212	C D	2-1/16" 2-1/16"	233 233	-	36"	W.E. Equipment
2R10	619-RC & 162-RC	Green White	A B	1-5/8" 3-3/4"	233 233	212	C D	2-1/16" 2-1/16"	233 233	-	36"	W.E. 144 & 706-A Receivers
2R11	623	Green Red	A B	2-3/4" 1-1/4"	233 233	212	C D	5" 5"	233 233	-	30"	W.E. 1040U, 1140CN, or 1340CN Deskstands
2R12	624	Green White	A B	1-5/8" 3-3/4"	233 233	212	C D	5" 5"	233 233	-	30"	W.E. 51C, 51AL, or 51CN Deskstands with 144 Rec. also 20CC Transmitter Arm
2R13	612 & 61-PB	Brown Red	A B	3" 3"	237 237	s/c	C D	3" 3"	151 151	s/c	33"	A.E. Equipment
2R14	61	Brown Black	A B	3" 3"	151 151	s/c	C D	3-3/4" 3-3/4"	237 237	s/c	36"	Kellogg & Monarch Equipment
2R15	617-RC	Red Green	A B	2-3/4" 2-3/4"	237 237	s/c	C D	4-1/2" 4-1/2"	151 151	s/c	10 1/2"	W.E. 518-W Receiver
2R16	615	Green Red	A B	2" 2"	237 237	s/c	C D	4-1/2" 4-1/2"	159 159	s/c	30"	W.E. 40CN Deskstand & Telo. Arms 40BS & 48B
2R17	610	Red Green	A B	3-1/2" 3-1/2"	151 151	s/c	C D	3-1/2" 3-1/2"	239 239	s/c	36"	S.C. Equipment
2R18	605-RC	Red Blue	A B	3" 3"	177 177	s/c	C D	4" 4"	233 233	s/c	15"	W.E. Receiver of 1320A Telephone Set
2R19	614-RC	Green White	A B	5" 5"	233 233	s/c	C D	3-1/2" 3-1/2"	159ins 159ins	s/c	30"	W.E. Equipment
2R20	606-RC	Green Red	A B	4-1/2" 4-1/2"	159 159	s/c	C D	5" 5"	233 233	s/c	30"	W.E. Exposed Binding Post Receivers ✓
2R21	608-RC	Green White	A B	3-1/2" 3-1/2"	159 ins 159 ins	s/c	C D	1-1/4" 2-3/4"	233 233	s/c	30"	W.E. Deskstands & Transmitter Arms
2R22	60 & 60-RC	Green White	A B	5-3/8" 5-3/8"	159 159	-	C D	1-1/4" 2-3/4"	233 233	s/c	30"	W.E. 40P Transmitter Arm
2R23	600-RC	White Green	A B	3-3/4" 1-5/8"	233 233	212	C D	4-1/2" 4-1/2"	159 159	s/c	30"	W.E. 122, 128, 146 & other Receivers requiring W.E. #29 Pin Tip
2R24	607-RC	Green White	A B	5-3/8" 5-3/8"	159 159	-	C D	1-1/4" 2-3/4"	159ins 159ins	s/c	30"	W.E. 50 Deskstand
2R25	613	Red Green	A B	2-3/4" 1-7/8"	233 233	212	C D	5-3/8" 5-3/8"	159 159	-	30"	W.E. 20R, 20AH, 20CJ, 20CN, 40R, 40AH, 40CN, 41CJ Deskstands
2R26	621	Brown Black	A B	3" 3"	196 196	s/c	C D	4" 4"	237 237	s/c	20"	Kellogg Weatherproof 4883 & Receivers 81A & 80
2R27	616-RC	Green White	A B	5" 5"	233 233	s/c	C D	3-1/2" 3-1/2"	192 192	s/c	24"	W.E. 1148-DA, DB, DC, & DD Transmitter Arms
2R28	636	White Green	A B	3-5/8" 3-5/8"	192 192	s/c	C D	3" 1-1/4"	233 233	s/c	30"	W.E. Equipment J



RECEIVER CORDS--TWO CONDUCTOR--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	TRACER COLORS	LEG REF.	LEG LENGTH	TERM- INAL	STAY FAST- ENER	LEG REF.	LEG LENGTH	TERM- INAL	STAY FAST- ENER	CORD LENGTH "E"	TO BE USED ON THE FOLLOWING EQUIP- MENT:
2R29	622-RC	White Green	A B	2-3/4" 1-3/8"	233 233	212	C D	3-1/2" 3-1/2"	192 192	s/c	30"*	W.E. 716-C Receiver, also W.E. 1020AB, 1120AB, 1042AB 1042BR, 1142AB, 1020C, 1120C, 1020D & 1020E Transmitter Arms
2R30	629	Green White	A B	4-1/2" 4-1/2"	235 235	s/c	C D	1-1/8" 2-3/4"	233 233	s/c	36"	W.E. Equipment
2R31	630	Brown Red	A B	3-1/2" 3-1/2"	233 233	s/c	C D	3-1/2" 3-1/2"	TL 1/8" TL 1/8"	s/c	36"	-
2R32	62A & 61AD	Brown Black	A B	3-1/2" 3-1/2"	151 151	s/c	C D	2" 2"	151 151	s/c	36"	Kellogg & Chicago Telephone Equipment
2R33	61-AB	Red Green	A B	2-7/8" 2-7/8"	151 151	s/c	C D	2-7/8" 2-7/8"	151 151	s/c	36"	Monarch & Amer. Elec. Equipment.
2R34	61-AA & 61-A	Red Green	A B	3-1/2" 3-1/2"	151 151	s/c	C D	3-1/2" 3-1/2"	151 151	s/c	36"	S.C. & Kellogg Equipment
2R35	602-RC	Red Green	A B	3-1/2" 3-1/2"	159 159	s/c	C D	5" 5"	159 159	s/c	27"*	W.E. Equipment
2R36	638-RC	White Red	A B	4" 3-3/4"	159 159	s/c	C D	3-3/4" 3-3/4"	159 Ins 159 Ins	s/c	24"*	W.E. Equipment
2R37	603-RC	Red White	A B	2" 2"	196 196	212	C D	3-1/2" 3-1/2"	159 159	s/c	48"*	W.E. 528 Receiver in 19C Test Set
2R38	609-RC	Red White	A B	2" 2"	192 192	212	C D	3-1/2" 3-1/2"	159 159	s/c	24"*	W.E. 515 Receiver in 1017 Type Test Set
2R39	63	Red Green	A B	3-1/2" 3-1/2"	TL 1/8" TL 1/8"	s/c	C D	3-1/2" 3-1/2"	151 151	s/c	36"	S.C. Equipment
2R40	627	Red Green	A B	3-1/2" 3-1/2"	151 151	s/c	C D	3-5/8" 3-5/8"	Bare Bare	s/c	36"	S.C. Equipment
2R41	637-WP	Red White	A B	2" 2"	235 235	212	C D	2" 2"	235 235	s/c	48"*	W.E. Equipment
2R42	63-A	Red Green	A B	3-1/2" 3-1/2"	TL 1/8" TL 1/8"	s/c	C D	3-1/2" 3-1/2"	TL 1/8" TL 1/8"	s/c	36"	-
2R43	632	White Blue	A B	3-1/2" 3-1/2"	239 239	s/c	C D	1-1/2" 1-1/2"	239 239	204	20"	S.C. 890-Mine-A-Phone & 950 Iron Clad Telos. & 27B Receiver..(Special 1/4" Tinsel Loop 11" long on body of cord.)

TL - TINSEL LOOP

*BODY LENGTH

Runzel

HEADSET CORDS

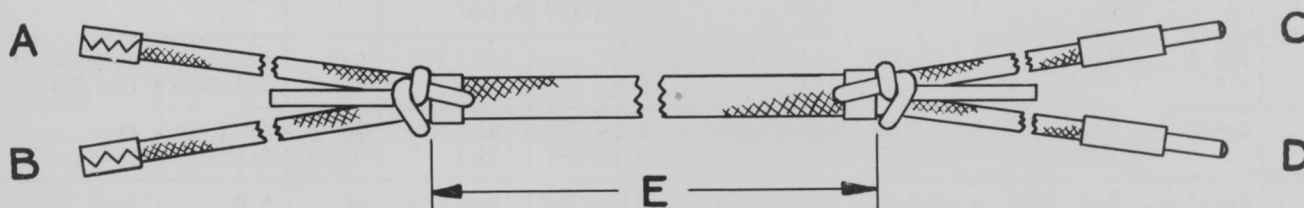


HEADSET CORDS--SINGLE--REPLACEMENT LIST

NEW RUNZEL CODE NO. NUMBER	OLD RUNZEL CODE NUMBER	REPLACES AUTOMATIC ELECTRIC CODE NO.	REPLACES KELLOGG CODE NUMBER	REPLACES STROMBERG-CARLSON CODE NO.	REPLACES WESTERN ELECTRIC CODE NO.	REPLACES OTHER MANUFACTURERS CODE NOS.
SH01	177-S	-	-	-	-	Runzel Original
SH02	705, 618-RC & 187-S-MP	-	-	-	R2CW	-

RECEIVER END

SET END



HEADSET CORDS--SINGLE--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	TRACER COLORS	LEG & END REF	LEG LENGTH	TERMINAL	STAY FASTENER	LEG & END REF	LEG LENGTH	TERMINAL	STAY FASTENER	CORD LENGTH "E"	TO BE USED ON THE FOLLOWING EQUIPMENT:
SH01	177-S-MP	White Red	A REC B REC	1-3/8" 1-3/8"	151 151	s/c	C SET D SET	3-1/2" 3-1/2"	151 151	s/c	60"*	W.E. 1002-C Headsets
SH02	705-RC, 618-RC & 187-S-MP	Red Green	A REC B REC	1-3/8" 1-3/8"	196 196	s/c	C SET D SET	3" 3"	159 159	s/c	60"*	W.E. 1003-A Headsets Supersedes W.E. 762

*BODY LENGTH

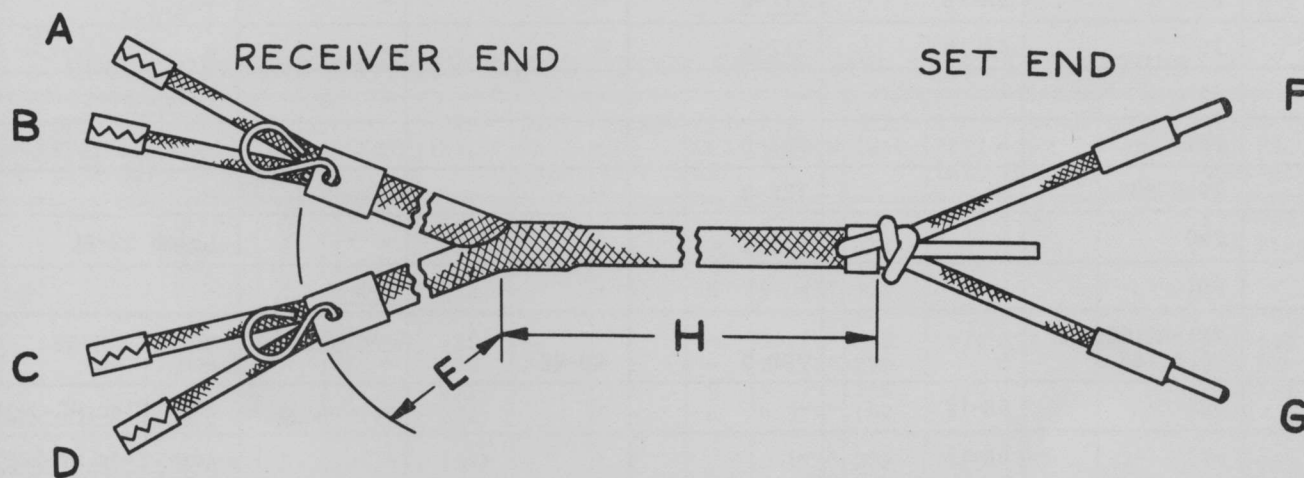
Switchboard operators, whether serving public subscribers or private industry appreciate the fine workmanship of RUNZEL cords. Outstanding among the many features of RUNZEL cords is the trimming operation. Skilled hands, trained to perform in accordance with rigid specifications...constant and varied inspections as the work progresses...produce a consistent quality of workmanship in every cord of our manufacture.

Clear reception, free of foreign interferences, lightens the work of operators whose work-a-day routine is telephone communications.



HEADSET CORDS--DOUBLE--REPLACEMENT LIST

NEW RUNZEL CODE NUMBER	OLD RUNZEL CODE NUMBER	REPLACES AUTOMATIC ELECTRIC CODE NO.	REPLACES KELLOGG CODE NUMBER	REPLACES STROMBERG-CARLSON CODE NO.	REPLACES WESTERN ELECTRIC CODE NO.	REPLACES OTHER MANUFACTURERS CODE NOS.
DH01	701-RC	-	-	-	R2CC	-
DH02	702-RC	-	-	-	R2CG	-
DH03	703-RC, 182-D, 173-D & 176-D	-	-	-	R2CY	-
DH04	704-RC & 178-D	-	-	-	R2DA	-
DH05	700-RC	-	-	-	R2DS	-
DH06	166-RR	-	-	-	364	-



HEADSET CORDS--DOUBLE--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	TRACER COLORS	Y-REC. LEG REF	Y-REC. LEG LENGTH	TERMINAL	STAY FASTENER	LENGTH OF - Y "E"	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	CORD LENGTH "H"	TO BE USED ON THE FOLLOWING EQUIPMENT:
DH01	701-RC	Red	A	2"	196	212	15-1/2"	F	3-5/8"	159	s/c	51"	W.E. Receiver 528 in 19 Type Test Set Supersedes W.E. Cord 584
		White	B	2"	196			-	-	-			
		White	C	2"	196	212		-	-	-			
		Green	D	2"	196			G	3-5/8"	159			
DH02	702-RC	White	A	2"	196	212	15-1/2"	F	6"	233	s/c	51"	Supersedes W.E. Cord 696
		Red	B	2"	196			-	-	-			
		Red	C	2"	196	212		-	-	-			
		Green	D	2"	196			G	6"	233			
DH03	703-RC, 182-D, 173-D & 176-D	Red	A	2"	235	212	15-1/2"	F	3"	151	s/c	42"	W.E. 1002-C Headset supersedes W.E. Cord 763
		White	B	2"	235			-	-	-			
		White	C	2"	235	212		-	-	-			
		Green	D	2"	235			G	3"	151			
DH04	704-RC & 178-D	Red	A	2"	235	212	15-1/2"	F	13/16"	158	-	42"	W.E. 1002-F Headset & 47B or 347B plug; supersedes W.E. Cord 768
		White	B	2"	235			-	-	-			
		White	C	2"	235	212		-	-	-			
		Green	D	2"	235			G	3/8"	158			
DH05	700-RC	Green	A) Outer	3"	192	s/c	18" Rec Arm	F	2-1/2"	233	212	66"	W.E. 1010-A Headset (series connection) supersedes W.E. Cord 571
		White	B) Rec	3"	192			-	-	-			
		White	C) Inner	3"	192	s/c		-	-	-			
		Red	D) Rec	3"	192			G	1"	233			
DH06	166-RR	Green	A) Outer	3"	159	s/c	18" Rec Arm	F	2-1/2"	233	s/c	72"	W.E. 147W Dble. Head Receivers in series & 20 or 40 Type Desk Stand
		White	B) Rec	3"	159			-	-	-			
		White	C) Inner	3"	159			-	-	-			
		Red	D) Rec	3"	159			G	1"	233			

* BODY LENGTH

Runzel OPERATORS BREASTPLATE CORDS

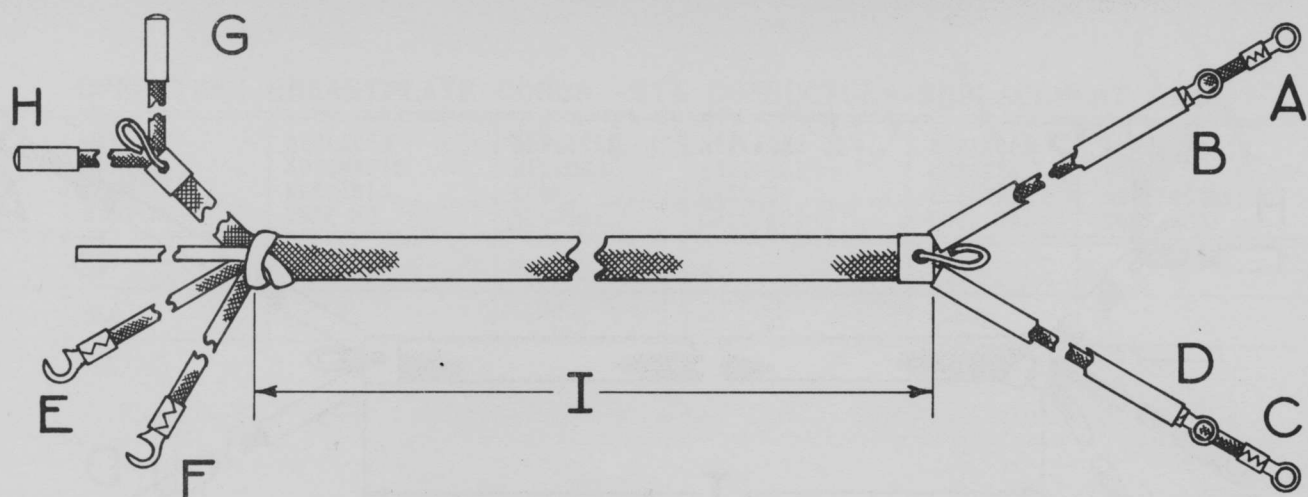
OPERATORS BREASTPLATE CORDS--FOUR CONDUCTOR--REPLACEMENT LIST

NEW RUNZEL CODE NUMBER	OLD RUNZEL CODE NUMBER	REPLACES AUTOMATIC ELECTRIC CODE NO.	REPLACES KELLOGG CODE NUMBER	REPLACES STROMBERG- CARLSON CODE NO.	REPLACES WESTERN ELECTRIC CODE NO.	REPLACES OTHER MANUFACTURERS CODE NOS.
4001	77	-	<u>721-0</u>	-	-	-
4002	82	DB-15	<u>711-0</u>	-	-	-
4003	75	DB-14	<u>712-0</u>	-	-	-
4004	86	-	-	-	-	<u>Leich 14-C</u>
4005	751	-	<u>743-0</u>	-	-	-
4006	79 & 805	-	<u>722-0</u>	-	-	-
4007	790	-	<u>713-0</u>	-	-	Leich 30-RL
4008	801	-	-	-	<u>L-4-D</u>	-
4009	781-RC, 809-RC 76 & 783	- -	- 709-0	- MO-4E	<u>L-4-B & L4AB</u> -	- -
4010	784	DB-13	-	-	-	<u>Amer. Elec. MC-54245</u>
4011	-	DB-12	-	-	-	<u>Amer. Elec. MC-54220, & Monarch Equip.</u>
4012	750	-	<u>741-0</u>	-	-	-
4013	800	-	-	<u>MO-4F</u>	-	-
4014	803	-	-	-	<u>L-4-R</u>	-
4015	782	-	-	-	<u>L-4-F</u>	-
4016	78 & 804	DB-17	-	-	<u>L-4-E</u>	-
4017	780	-	-	-	<u>L4AC</u>	-
4018	81	DB-16	-	<u>MO-4C</u>	-	-



Breastplate cords are subject to severe wear under even normal working conditions. RUNZEL cords have set a record for dependable service . . . largely because they are precision made . . . they withstand severe usage.

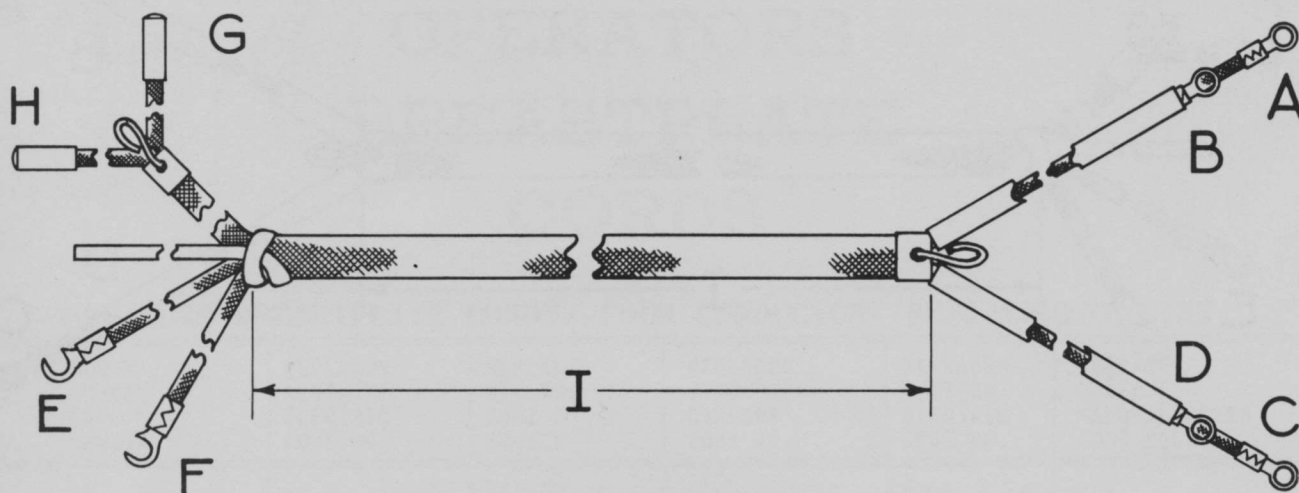
The formula for the manufacture of RUNZEL breastplate cords is a rigid one . . . frequent inspections as the work progresses maintains the prescribed quality demanded by the formula. When you specify RUNZEL cords you are assuring yourself of the finest in quality, service and reception. You can count on maximum service because we put years of experience into every inch of RUNZEL cord.



OPERATORS BREASTPLATE CORDS--FOUR CONDUCTOR--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	TRACER COLORS	PLUG LEG REF.	LEG LENGTH	TERMINAL	STAY FASTENER	TRANS. LEG REF.	REC. LEG REF.	LEG LENGTH	TERMINAL	STAY FASTENER	TRANS. ARM LENGTH	CORD LENGTH "i"	TO BE USED ON THE FOLLOWING EQUIPMENT:
4001	77	Black Brown Red Yellow	A B C D	1" 1" 1-1/4" 1-1/4"	233 233 233 233	-	E F - -	- - G H	3-1/2" 3-1/2" 4-3/4" 4-3/4"	239 239 159 159	s/c s/c	14"	68"	Kellogg 145 Plug
4002	82	Black Brown Red Yellow	A B C D	1" 1" 1-1/4" 1-1/4"	233 233 233 233	-	E F - -	- - G H	3-1/2" 3-1/2" 4-3/4" 4-3/4"	239 239 159 159	s/c s/c	14"	68"	Kellogg 145 Plug. Plaited Type Cord
4003	75	Brown Black Red Yellow	A B C D	1-1/4" 1-1/4" 1-1/2" 1-1/2"	194A 194A 194A 194A	-	E F - -	- - G H	3-1/2" 3-1/2" 4-3/4" 4-3/4"	239 239 159 159	s/c s/c	14"	68"	Kellogg 25 Plug
4004	86	Yellow Green Red White	A B C D	2-3/4" 1-5/16" 1-5/16" 2-3/4"	180 180 180 180	s/c	- E F -	G - - H	2" 5" 5" 2"	196 181 181 196	s/c s/c	20-3/8"	73-3/4"	Leich 62 Plug
4005	751	Brown Red Yellow Blue	A B C D	2-5/8" 2-1/8" 2-1/8" 2-5/8"	194A) Rubber 194A) Sleeve 194A) Rubber 194A) Sleeve	-	E - - F	- G H -	3-1/2" 4-3/4" 4-3/4" 3-1/2"	239 159 159 239	s/c s/c	14-5/8"	70"	W.E. 289A Plug; Kellogg 85A Rec. & Kellogg 177 Transmitter
4006	79 & 805	Brown Black Red Yellow	A B C D	1-5/8" 1-5/8" 1-7/8" 1-7/8"	TL TL TL TL	-	E F - -	- - G H	3-1/2" 3-1/2" 4-3/4" 4-3/4"	239 239 159 159	- -	14"	68"	Kellogg 182 Plug
4007	790	Brown Black Red Yellow	A B C D	1-5/8" 1-5/8" 1-7/8" 1-7/8"	TL TL TL TL	-	E F - -	- - G H	3-1/2" 3-1/2" 4-3/4" 4-3/4"	239 239 159 159	- -	14"	68"	Kellogg 182 Plug Plaited Type Cord
4008	801	Yellow Green Red Blue	A B C D	2-21/32" 2-7/32" 2-7/32" 2-21/32"	158) Rubber 158) Sleeve 210 158) Rubber 158) Sleeve	-	E - - F	- G H -	4-1/2" 4" 4" 4-1/2"	152Ains 159 159 152Ains	s/c 212	18"	48"*	W.E. 137 or sim. type Plug; 128 Receiver & 234 Transmitter
4009	781-RC, 809-RC, 76 & 783	Yellow Green Red Blue	A B C D	2-21/32" 2-7/32" 2-7/32" 2-21/32"	158) Rubber 210 158) Sleeve 158) Rubber 158) Sleeve	-	E - - F	- G H -	4-1/2" 4" 4" 4-1/2"	152Ains 159 ins 159 ins 152Ains	s/c 212	18"	48"*	W.E. 137 Plug, 128 Receiver & 234 Transmitter
4010	784	White Brown Yellow Red	A B C D	3-1/16" 3-1/16" 2-5/8" 2-5/8"	173 173 173 173	s/c	E F - -	- - G H	5-1/4" 5-1/4" 2-1/4" 2-1/4"	TL 1/8" TL 1/8" 151 151	s/c s/c	18"	64"	Amer. Elec. MC-5742 Plug on Oper. Set MC-3838 & MC-3839 Also fits Monarch

*BODY LENGTH



OPERATORS BREASTPLATE CORDS--FOUR CONDUCTOR--SPECIFICATIONS

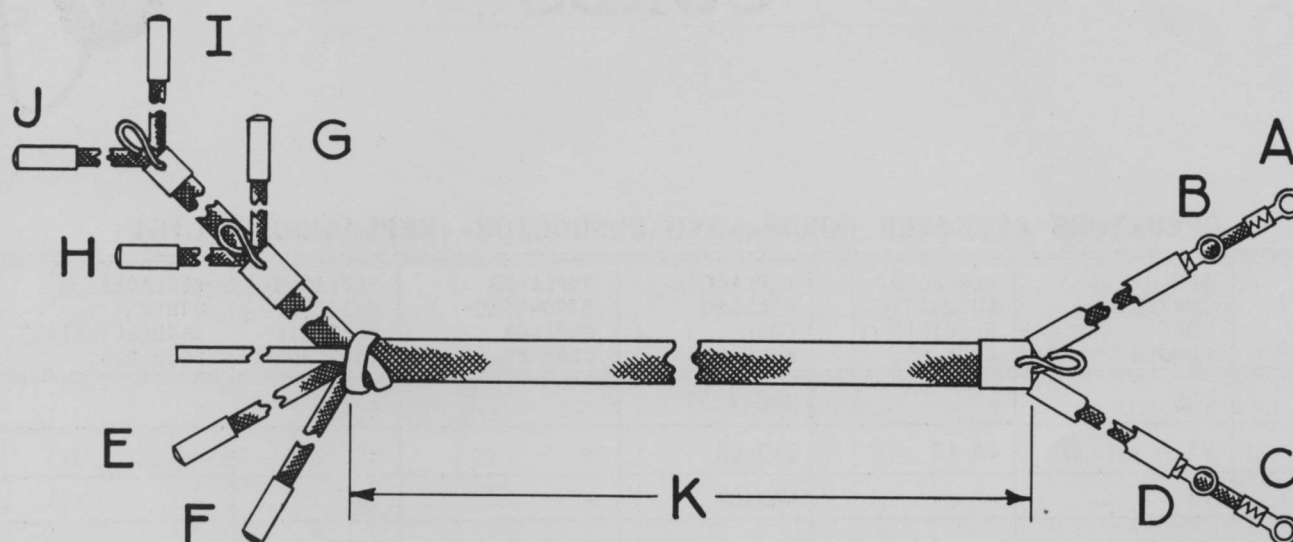
NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	TRACER COLORS	PLUG LEG REF.	LEG LENGTH	TERMINAL	STAY FASTENER	TRANS. LEG REF.	REC. LEG REF.	LEG LENGTH	TERMINAL	STAY FASTENER	TRANS. ARM LENGTH	CORD LENGTH "i"	TO BE USED ON THE FOLLOWING EQUIPMENT:
4011	-	White Brown Red Yellow	A B C D	1" 1-1/2" 1" 1-1/2"	TL 1/8" TL 1/8" TL 1/8" TL 1/8"	s/c	E F - -	- - G H	5-1/4" 5-1/4" 2-1/4" 2-1/4"	TL 1/8" TL 1/8" 151 151	s/c s/c	18"	64"	Amer. Elec. MC-5732 Plug. Also fits Monarch Equipment
4012	750	Blue Yellow Red Green	A B C D	1-3/8" 1-3/8" 1" 1"	TL TL TL TL	s/c	E - - F	- G H -	4-3/4" 2-1/4" 2-1/4" 4-3/4"	239 196 196 239	s/c s/c	18"	81-5/8"	Kellogg Equipment
4013	800	Blue Green Red Yellow	A B C D	1-3/8" 1" 1" 1-3/8"	TL 1/8" TL 1/8" TL 1/8" TL 1/8"	s/c	E F - -	- - G H	5" 5" 2-1/4" 2-1/4"	239 239 196 196	s/c s/c	18"	60"*	S.C.#4 Oper. Breastplates Telephone Sets
4014	803	Yellow Green Blue Red	A B C D	2-5/8" 2-1/8" 2-5/8" 2-1/8"	194A) Rubber 194A) Sleeve 194A) Rubber 194A) Sleeve	210 Ins - -	E - F -	- G - H	5-1/2" 2" 5-1/2" 2"	235 235 235 235	s/c s/c	18"	48"*	W.E. 528 Receiver 396A Transmitter & 289A Plug
4015	782	Yellow Green Blue Red	A B C D	2-21/32" 2-7/32" 2-21/32" 2-7/32"	158) Rubber 158) Sleeve 158) Rubber 158) Sleeve	210 - - -	E - F -	- G - H	5-1/2" 2" 5-1/2" 2"	196 196 196 196	s/c 212	18"	48"*	W.E. 137 or sim. Type Plug; 528 Receiver & 396A Transmitter
4016	78 & 804	Yellow Green Blue Red	A B C D	2-21/32" 2-7/32" 2-21/32" 2-7/32"	158) Rubber 158) Sleeve 158) Rubber 158) Sleeve	210 - - -	E - F -	- G - H	4-1/2" 2" 4-1/2" 2"	152Ains 196 152Ains 196	s/c 212	18"	48"*	W.E. 137 or sim. Type Plug; 528 Receiver & 234 Transmitter
4017	780	Yellow Green Red Blue	A B C D	2-21/32" 2-7/32" 2-7/32" 2-21/32"	158) Rubber 158) Sleeve 158) Rubber 158) Sleeve	210 - - -	E - - F	- G H -	4-1/2" 4" 4" 4-1/2"	152Ains 192 192 152Ains	s/c s/c	18"	66"*	Western Electric Equipment
4018	81	Blue Green Red Yellow	A B C D	1-3/8" 1" 1" 1-3/8"	TL 1/8" TL 1/8" TL 1/8" TL 1/8"	s/c	E F - -	- - G H	5" 5" 1-1/4" 1-1/4"	239 239 TL 1/8" TL 1/8"	s/c s/c	18"	60"*	S.C. 20 Receiver 18 Transmitter & 23 Plug; also Garford Type Plug

TL-TINSEL LOOP

*BODY LENGTH

OPERATORS BREASTPLATE CORDS--SIX CONDUCTORS-REPLACEMENT LIST

NEW RUNZEL CODE NUMBER	OLD RUNZEL CODE NUMBER	REPLACES AUTOMATIC ELECTRIC CODE NO.	REPLACES KELLOGG CODE NUMBER	REPLACES STROMBERG-CARLSON CODE NO.	REPLACES WESTERN ELECTRIC CODE NO.	REPLACES OTHER MANUFACTURERS CODE NOS.
6001	851	DB-18	-	-	L-6-A	-
6002	850	-	-	-	L-6-E	-



OPERATORS BREASTPLATE CORDS--SIX CONDUCTOR--SPECIFICATIONS

NEW RUNZEL CODE NO. 6001 OLD RUNZEL CODE NO. 851					NEW RUNZEL CODE NO. 6002 OLD RUNZEL CODE NO. 850				
TRACERS: Yellow, Green, Red, and Blue					TRACERS: Yellow, Green, Red and Blue				
TRIM: PLUG END	REF.	LENGTH	TERMINAL	STAY FASTENER	TRIM: PLUG END	REF.	LENGTH	TERMINAL	STAY FASTENER
Yellow	A	2-21/32"	158) Rubber	s/c	Yellow	A	2"	194A) Rubber	210
Green	B	2-7/32"	158) Sleeve		Green	B	1-1/2"	194B) Sleeve	
Red	C	2-7/32"	158) Rubber		Red	C	1-1/2"	194B) Rubber	
Blue	D	2-21/32"	158) Sleeve		Blue	D	2"	194A) Sleeve	
TRANSMITTER END:					TRANSMITTER END:				
Yellow	E	4-1/2"	152A Ins	s/c	Yellow	E	5-1/2"	196	s/c
Blue	F	4-1/2"	152A Ins		Blue	F	5-1/2"	196	
TRANSMITTER ARM:		18"			TRANSMITTER ARM:		18"		
INNER RECEIVER:					INNER RECEIVER:				
Green	G	4"	159	s/c	Green	G	2"	196	212
Red	H	4"	159		Red	H	2"	196	
RECEIVER ARM:		18"			RECEIVER ARM:		18"		
OUTER RECEIVER:					OUTER RECEIVER:				
Red	I	4"	159	s/c	Red	J	2"	196	212
Green	J	4"	159		Green	J	2"	196	
CORD LENGTH:	K	72"*			CORD LENGTH:	K	72"*		

To be used on the following equipment:
Operators Parallel Double Head Receiver & Breast Transmitter; arranged for W.E.137 plug, 128A receivers & 234 Transmitter.

To be used on the following equipment:
Operators Parallel Double Head Receiver & Breast Transmitter; arranged for W.E.289A plug, 528 receivers & 396A Transmitter.

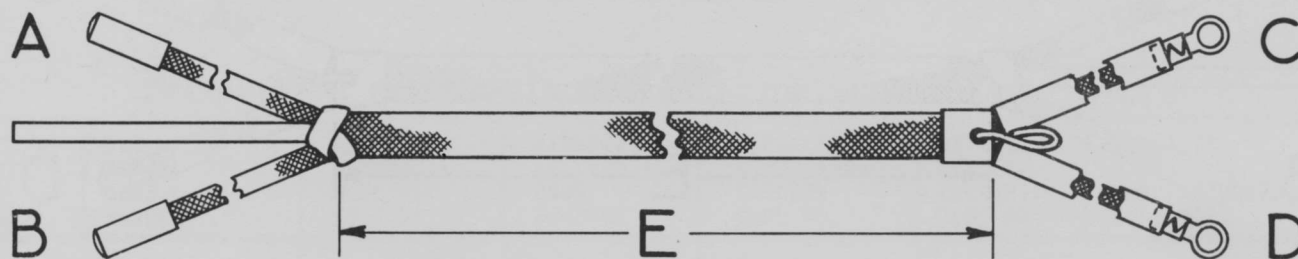
*BODY LENGTH

Runzel OPERATORS RECEIVER CORDS



OPERATORS RECEIVER CORDS--TWO CONDUCTOR--REPLACEMENT LIST

NEW RUNZEL CODE NUMBER	OLD RUNZEL CODE NUMBER	REPLACES AUTOMATIC ELECTRIC CODE NO.	REPLACES KELLOGG CODE NUMBER	REPLACES STROMBERG- CARLSON CODE NO.	REPLACES WESTERN ELECTRIC CODE NO.	REPLACES OTHER MANUFACTURERS CODE NOS.
2001	748	-	726-T	-	<u>L-2-C</u>	-
2002	73	DA-13	<u>710-OR</u>	-	-	-
2003	74	-	468-OR	-	<u>30</u>	-
2004	721 & 742	- DA-15	- 492-OR	- -	<u>R2CM</u> <u>369</u>	- -
2005	71	-	<u>237-OR</u>	-	-	-
2006	70	DA-12	<u>708-OR</u>	-	-	Leich 31
2007	72	-	466-OR	-	<u>L-2-E</u>	-
2008	720	DA-10	710-0A	-	-	<u>Amer.Elec. MC-5499</u>
2009	743	-	<u>719-OR</u>	-	-	-
2010	722	-	-	-	R2DB	-
2011	725	-	-	-	<u>D-121317</u>	-
2012	745	-	-	<u>M0-2H</u>	-	-
2013	746	-	-	-	<u>L-2-J</u>	-
2014	747	-	-	-	<u>L-2-K</u>	-
2015	726	-	-	-	<u>L-2-A</u>	-
2016	723 & 103-RR	-	-	-	-	<u>Runzel Original</u>
2017	724	-	-	-	D-121316	-
2018	744	DA-14	-	<u>M0-2F</u>	-	-
2019	741	-	710-0B	<u>M0-2i</u>	-	-
2020	740	DA-11	-	-	-	<u>Amer.Elec. MC-54100,</u> <u>& Monarch Equipment</u>



OPERATORS RECEIVER CORDS--TWO CONDUCTOR--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	TRACER COLORS	LEG REF.	LEG LENGTH	TERM INAL	STAY FAST-ENER	LEG REF.	LEG LENGTH	TERM INAL	STAY FAST-ENER	CORD LENGTH "E"	TO BE USED ON THE FOLLOWING EQUIPMENT:
2001	748	Blue Yellow	A B	2-1/2" 2-1/2"	Rubber 158 Sleeves 158	s/c	C D	4-1/2" 4-1/2"	152A 152A	Ins s/c Ins	66"	W.E. 386 or Similar Type Transmitter
2002	73	Brown Black	A B	1" 1"	233 233	s/c	C D	3" 3"	159 159	s/c	72"	Kellogg 145 & 146 Plugs & Kellogg 85A Receiver
2003	74	Brown Black	A B	7/16" 7/16"	194A 194A	-	C D	5" 5"	159 159	s/c	72"	W.E. Equipment Knotted at Plug End
2004	721 & 742	Green Red	A B	13/16" 3/8"	158 158	-	C D	5" 5"	159 159	212	66"	W.E. 128 Receiver in Connection with 1200 & 1360 Series Swbds also W.E. 136 Plug, 3/16" Dia.
2005	71	Brown Black	A B	1/2" 3/8"	Bare 180	-	C D	3" 3"	159 159	s/c	72"	Kellogg Plug 75, Diameter .196" - .216"
2006	70	Brown Black	A B	3/4" 3/4"	Bare 194A	-	C D	3" 3"	159 159	s/c	72"	Kellogg 107, 247; W.E. 347 Superseding 47 Plug Diameter .292" - .312"
2007	72	Green Red	A B	2-7/32" 2-7/32"	158 Ins 158 Ins	s/c	C D	5" 5"	159 159	s/c	66"	W.E. 128 Receiver on 9 & 105 Swbds also Kel. 139 Plug
2008	720	Red Brown	A B	2-1/4" 2-1/4"	TL 1/8" TL 1/8"	-	C D	2-1/4" 2-1/4"	151 151	s/c	72"	Amer. Elec. Receiver MC-5113 & Plug MC-5717; also Monarch Equipment
2009	743	Red Yellow	A B	1-7/8" 1-7/8"	TL 1/8" TL 1/8"	s/c	C D	4-3/4" 4-3/4"	159 159	s/c	68"	Kellogg 182 Plug
2010	722	Green Red	A B	1/4" 11/16"	158 158	-	C D	2-1/8" 2-1/8"	235 235	212	72"	W.E. Equipment
2011	725	Green Red	A B	11/16" 1/4"	242 242	-	C D	3-3/4" 3-3/4"	235 235	-	73"	W.E. Operators Dispatch Receiver
2012	745	Green Red	A B	5/8" 1"	170 170	-	C D	2-1/4" 2-1/4"	196 196	s/c	72"	S.C. 29 Oper. Receiver & S.C. 40 Plug
2013	746	Yellow Red	A B	1" 1"	158 158	-	C D	2" 2"	196 196	212	66"	W.E. 528 Receiver and 148 or 273A-3 Plug. Knotted at Plug end.
2014	747	Green Red	A B	2-1/8" 2 1/8"	Rubber 194A Sleeves	212 Ins	C D	2" 2"	196 196	s/c	48"	W.E. 289A Plug on 9 and 105 Swbds using 232 Trans.
2015	726	Red Green	A B	2-7/32" 2-7/32"	Rubber 158 Sleeves 158	s/c	C D	2" 2"	196 196	s/c	48"	W.E. 528 Receiver & 137 or Similar Type Plug



OPERATORS RECEIVER CORDS--TWO CONDUCTOR--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	TRACER COLORS	LEG REF	LEG LENGTH	TERMINAL	STAY FASTENER	LEG REF.	LEG LENGTH	TERMINAL	STAY FASTENER	CORD LENGTH "E"	TO BE USED ON THE FOLLOWING EQUIPMENT:
2016	723	Brown Black	A B	3" 3"	Rubber 158 Sleeve 158	-	C D	5" 5"	158) Rubber - 158) Sleeve		60"	Runzel Original
2017	724	Green Red	A B	1 1/16" 1 1/4"	242 242	-	C D	3-3/4" 3-3/4"	152A ins 152A ins	s/c	73"	W.E. Operators Dispatch Receiver
2018	744	Green Red	A B	5/8" 1"	170 170	-	C D	1-1/4" 1-1/4"	TL 1/8" TL 1/8"	s/c	72"	S.C.20 Operator's Receiver & 40 Plug
2019	741	Green Red	A B	1-3/8" 1"	TL 1/8" TL 1/8"	s/c	C D	2-1/4" 2-1/4"	196 196	s/c	48"	S.C.29 Receiver and 23 Plug
2020	740	Red Brown	A B	2-1/4" 2-1/4"	TL 1/8" TL 1/8"	-	C D	2-1/4" 2-1/4"	TL 1/8" TL 1/8"	s/c	72"	Amer.Elec.Receiver MC-5108 & Plug MC-5717; also Monarch Equipment

TL-TINSEL LOOP



CORD TRIMMING AND TESTING

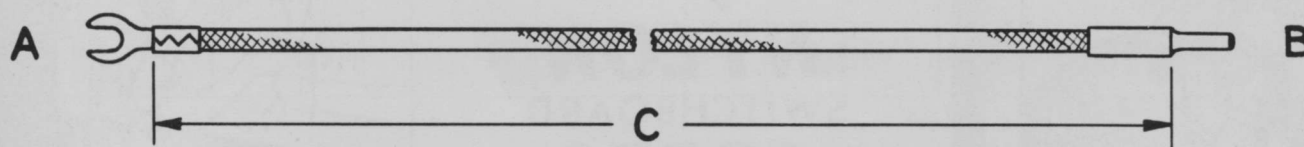
Runzel

TRANSMITTER CORDS



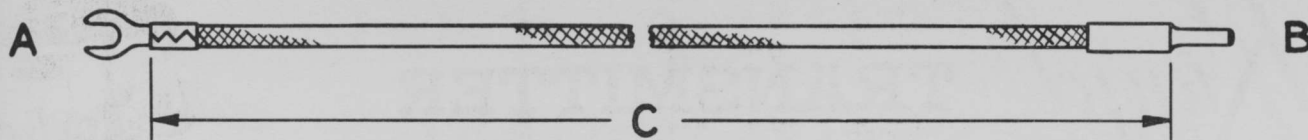
TRANSMITTER CORDS--SINGLE CONDUCTOR--REPLACEMENT LIST

NEW RUNZEL CODE NUMBER	OLD RUNZEL CODE NUMBER	REPLACES AUTOMATIC ELECTRIC CODE NO.	REPLACES KELLOGG CODE NUMBER	REPLACES STROMBERG- CARLSON CODE NO.	REPLACES WESTERN ELECTRIC CODE NO.	REPLACES OTHER MANUFACTURERS CODE NOS.
IT01	92	-	-	<u>T-1-B</u>	-	-
IT02	906-RC	-	-	-	<u>T-1-E</u>	-
IT03	91	DT-11	465-T	-	<u>437</u>	-
IT04	99-RC & 903	-	505-T	-	<u>T-1-J</u>	-
IT05	95,905,950 & 907	-	-	-	<u>T-1-C</u>	-
IT06	96	-	-	-	<u>T-1-F</u>	-
IT07	98	-	<u>261-0T</u>	-	-	-
IT08	902-RR	-	-	-	-	<u>Runzel Original</u>
IT09	90	DT-12	<u>499-T</u>	-	-	-
IT10	97	DT-13	-	<u>M0-1-A</u>	-	-
IT11	904-RC	-	-	-	<u>T-1-G</u>	-
IT12	900	DT-10	-	-	-	<u>Amer. Elec. MC-54176</u>
IT13	901	-	-	-	<u>T-1-M</u>	-
IT14	-	-	-	-	<u>T-1-H</u>	-
IT15	-	-	-	<u>T-1-A</u>	-	-
IT16	-	-	-	<u>T-1-H</u>	-	-



TRANSMITTER CORDS--SINGLE CONDUCTOR--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	OUTER COLOR	TERMINAL "A"	STAY FASTENER	TERMINAL "B"	CORD LENGTH "C"	TO BE USED ON THE FOLLOWING EQUIP- MENT:
IT01	92	Brown	167	-	167	4"	S.C. #10 Transmitter
IT02	906-RC	Green	233	-	241	9-7/8"	W.E. #20 Deskstands
IT03	91	Brown	159	-	233	72"	W.E. Transmitter Arms or Suspended Type Transmitters
IT04	99-RC & 903	Yellow	157	-	233	9-7/8"	W.E. Equipment
IT05	95,905,950 & 907	Yellow	152A Ins	-	233	9-7/8"	W.E. Deskstands



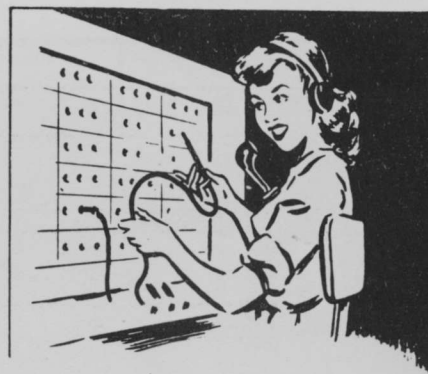
TRANSMITTER CORDS--SINGLE CONDUCTOR--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	OUTER COLOR	TERMINAL "A"	STAY FASTENER	TERMINAL "B"	CORD LENGTH "C"	TO BE USED ON THE FOLLOWING EQUIPMENT:
IT06	96	Green	152A Ins	-	152A Ins	8-1/2"	W.E. 1002-D & E Handsets
IT07	98	Brown	151	s/c 6"	151	72"	Kellogg Suspended Type Transmitter or Test Set
IT08	902-RR	Brown	227	-	159	10-1/4"	-
IT09	90	Brown	1/2" Bare	-	151	72"	Kellogg Suspended Type Transmitter
IT10	97	Brown	TL 1/8"	-	151	48"	S.C. Suspended Type Transmitter
IT11	904-RC	Red	152A Ins	-	TL 1/8"	4-1/2"	W.E. 1002-AC Handset
IT12	900	Brown	TL 1/8"	loop 5/8"	TL 3/16"	67"	Auto. Elec. Suspended Transmitter
IT13	901	Brn-red	158	-	158	2-1/2"	W.E. 320 Telephone Sets
IT14	-	Green	233	-	233	8"	W.E. 1D Handset Handles & Cable Transfer Clips
IT15	-	Brown	238	-	TL 1/8"	4"	S.C. Miscellaneous Equipment
IT16	-	Brown	TL 1/8"	-	TL 1/8"	Specified	S.C. Miscellaneous Equipment

TL-TINSEL LOOP



Runzel V.N. SERIES NYLON SWITCHBOARD CORDS



Our announcement concerning RUNZEL "VN" SERIES NYLON CORDS has startled the Telephone industry. Everywhere, in every department of the service RUNZEL "VN" SERIES NYLON CORDS are the talk of the industry.

You'll like the features these cords contribute to your service. They're tough . . . durable . . . will withstand rugged handling . . . they're immune to moisture and mildew and what is more . . . RUNZEL "VN" SERIES NYLON CORDS have a distinctive appearance of quality. They are beautiful.

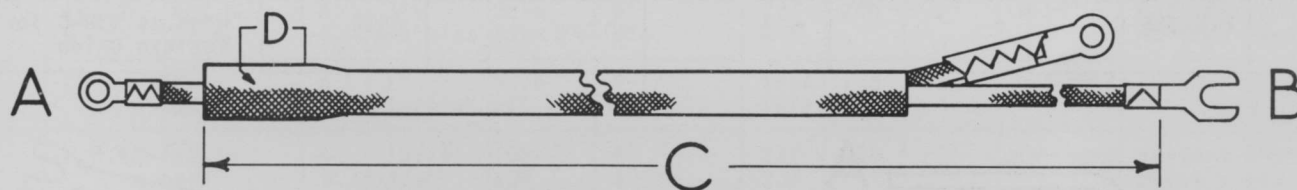
You are invited to write for samples.

Runzel SWITCHBOARD CORDS



SWITCHBOARD CORDS--ONE CONDUCTOR--REPLACEMENT LIST

NEW RUNZEL CODE NUMBER	OLD RUNZEL CODE NUMBER	REPLACES AUTOMATIC ELECTRIC CODE NO.	REPLACES KELLOGG CODE NUMBER	REPLACES STROMBERG-CARLSON CODE NO.	REPLACES WESTERN ELECTRIC CODE NO.	REPLACES OTHER MANUFACTURERS CODE NO.
IS01	100	-	-	-	S-1-A	-
IS02	105 & 105-RR	-	-	-	519	-
IS03	W.U. 511-B	-	-	-	*511	*Mfgd. as 511-B for Western Union



SWITCHBOARD CORDS--ONE CONDUCTOR--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	CONDUCTOR COLOR	PLUG END LEG LENGTH "A"	TERMINAL	BOARD END LEG LENGTH "B"	TERMINAL	STAY FASTENER	CORD LENGTH	DIAMETER "D"	INTENDED FOR USE WITH THE FOLLOWING PLUGS:
IS01	100	White	21/32"	233	5"	191A	193B	72"	5/16"	W.E. 116 or 1A
IS02	105	White	1/4"	205	2-1/2"	233	204	36"	5/16"	W.E. 116 on Test Boards 2A, 2B, or 3A
IS03	W.U. 511	White	13/16"	205	6"	237	204	72"*	.310"-.328"	Western Union 1A, 1B & 1C

*BODY LENGTH

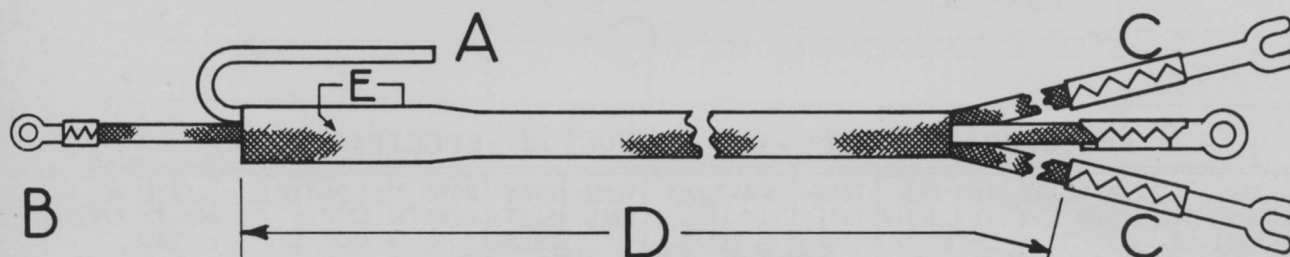
RUNZEL CORDS

The clarity of reception characteristic of Runzel cord is but one of the advantages you get when you replace your service with Runzel products.

The precision technique set up as factory standard throughout our plant plus special machines designed and built exclusively for making Runzel cord and wire . . . are your assurance of complete satisfaction in whichever replacement cord ordered.

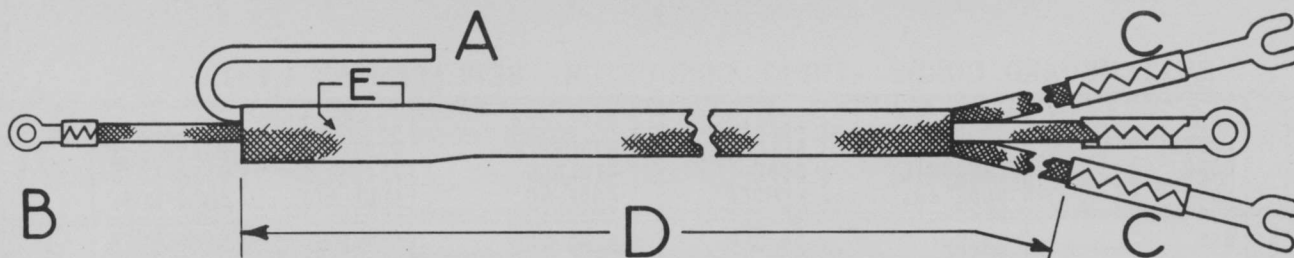
SWITCHBOARD CORDS--TWO CONDUCTOR--REPLACEMENT LIST

NEW RUNZEL CODE NUMBER	OLD RUNZEL CODE NUMBER	REPLACES AUTOMATIC ELECTRIC CODE NO.	REPLACES KELLOGG CODE NUMBER	REPLACES STROMBERG-CARLSON CODE NO.	REPLACES WESTERN ELECTRIC CODE NO.	REPLACES OTHER MANUFACTURERS CODE NOS.
2S01	1	DS-35	301-T0	S-23-P	-	-
2S02	1-A	-	-	-	-	Leich 3
2S03	1-T & 9-T	-	-	-	-	Runzel Original for Burns Express Board
2S04	2	DS-57	397-T0	S-24-K	S2A	-
2S05	2A	-	-	-	S2B	-
2S06	3	DS-56	324-T0	S-22-F	-	-
2S07	4	DS-44	-	S-22-B	-	-
2S08	17	DS-49	301-B	S-23-G	-	-
2S09	18, 22, & 28	DS-13	301-A	-	-	Amer. Elec. MC-5444, MC-54111, MC-54103
2S10	29	-	-	S-21-C	-	-
2S11	W.U. 536-C	-	-	-	*536	*Mfgd. as 536-C for Western Union



SWITCHBOARD CORDS--TWO CONDUCTOR--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	CONDUCTOR COLORS	PLUG LEG REF.	LEG LENGTH	TERMINAL	BOARD END LEG LENGTH "C"	TERMINAL	STAY FASTENER	CORD LENGTH "D"	DIAMETER "E"	INTENDED FOR USE WITH THE FOLLOWING PLUGS:
2S01	1	Red White	A B	1" 3/4"	Bare 242	6" 6"	191A 191A	204	72"	.292"-.312	Kellogg 3, 42, 70 138, 109; & S.C. S-1
2S02	1-A	Red White	A B	1" 5/8"	Bare 158	5" 5"	190 190	204	72"	5/16"	Leich 3A
2S03	1-T & 9-T	Red White	A B	1" 3/8"	Bare 178	6" 6"	169 169	204	72"	.292"-.312"	Amer. Elec. 5743 & 1188 on Burns Express Board or 347
2S04	2	Red White	A B	3/8" 13/16"	158 158	5" 5"	191A 191A	193B	72"	5/16"	W.E. 27, 32, 47 or 347, 53, 65; S.C. 61 & 62; Kellogg 247



SWITCHBOARD CORDS--TWO CONDUCTOR--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	CONDUCTOR COLORS	PLUG LEG REF.	LEG LENGTH	TERMINAL	BOARD END LEG LENGTH "C"	TERMINAL	STAY FASTENER	CORD LENGTH "D"	DIAMETER "E"	INTENDED FOR USE WITH THE FOLLOWING PLUGS:
2S05	2-A	Red White	A B	1/2" 1-7/32"	194B 194B	5" 5"	191A 191A	193B	72"	5/16"	W.E. 310 & 110
2S06	3	Blue White	A B	1" 13/16"	Bare 170	4-1/2" 4-1/2"	191A 191A	168	72"	.260"-280"	S.C. 56, 56X; Garford 2 conductor; & Kellogg 141, 211
2S07	4	Blue White	A B	1" 15/16"	Bare 194A	4-1/2" 4-1/2"	191A 191A	168	72"	.230"-240"	S.C. 36 & 57
2S08	17	Blue White	A B	1" 1-3/16"	Bare 242	4-1/2" 4-1/2"	191A 191A	204	72"	.285"-305"	S.C. 10, 32, 42 & 43
2S09	18, 22 & 28	Red Blue	A B	3/4" 5/8" plus	Bare Bare 1/4"	6" 6"	237 237	204	72"	5/16"	Amer. Elec. MC-5702, MC-5743 & A.E. K43
2S10	29	Blue White	A B	1" 1-1/16"	Bare 184	4-1/2" 4-1/2"	191A 191A	168	72"	.210"-220"	S.C. 33 & 39
2S11	W.U. 536	White Red	A B	13/16" 3/8"	158 158	6" 6"	237 237	204	72"	.315"-325"	Western Union Equipment's #3A & 3B or W.E. 347 or 47 *Over all braid green

QUALITIES OF A GOOD SWITCHBOARD CORD

There is more to the make-up of a switchboard cord than meets the eye. We who have produced cords for many years by the millions know that there are many important methods of manufacture which account for the service and easy handling of a good switchboard cord.

The part of a cord which receives the hardest wear is the outer braid. Realizing this, we exercise special care in seeing that the outer braid is applied with the proper tension and is put on smoothly and evenly. When this is done you are sure the braid will wear evenly and to its utmost. Also, a properly applied braid accounts for the flexibility desired.

Another important factor of the switchboard cord is how it is trimmed. Each cord

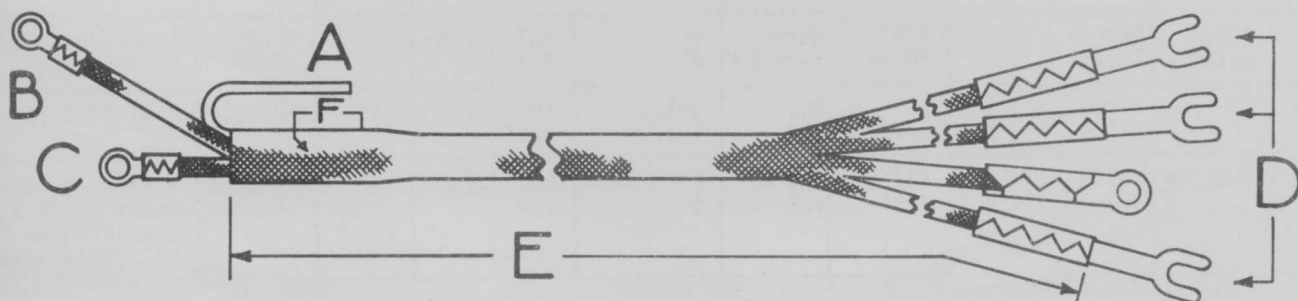
is made to fit a particular plug and in each case the leg lengths of the insulated tinsel must be accurately cut and trimmed and securely connected with the proper size terminal to insure the user that it will fit accurately and easily on the inner connections of the switchboard plug. Also, properly measured leg lengths and positively attached terminals on the conductors at the board end of the cord contribute to the easy installation of the cord.

Naturally, the inner conductors of the switchboard cordage must be perfect. In the Runzel method of fabrication the conductors are twisted with dummies and fillers with the proper length of lay and served with fine cotton to insure a smooth body surface. From this the completed cord is then made.

Frequent inspections as each cord progresses thru skilled hands, trained to the RUNZEL standard of manufacture, produces a cord of fine quality . . . RUNZEL switchboard cords unfailingly give long and satisfactory service because we "make them that way".

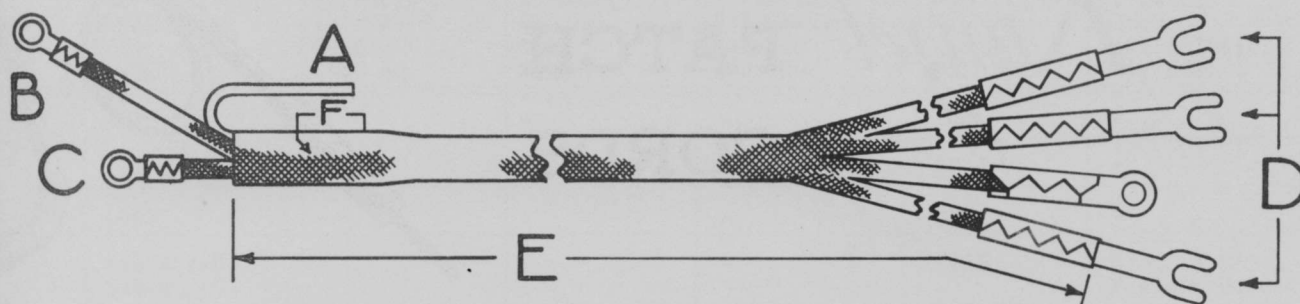
SWITCHBOARD CORDS--THREE CONDUCTOR--REPLACEMENT LIST

NEW RUNZEL CODE NUMBER	OLD RUNZEL CODE NUMBER	REPLACES AUTOMATIC ELECTRIC CODE NO.	REPLACES KELLOGG CODE NUMBER	REPLACES STROMBERG-CARLSON CODE NO.	REPLACES WESTERN ELECTRIC CODE NO.	REPLACES OTHER MANUFACTURERS CODE NOS.
3S01	6	DS-37	326-T0	-	-	-
3S02	7 & 25	DS-24	309-T0	-	-	Amer. Elec. 278
3S03	8	DS-52	-	S-32-K -	-	-
3S04	8A	DS-61	391-T0	S-33-NS	S3B	-
3S05	8B	DS-65	390-T0	S-32-M	S3A	-
3S06	8L & 19	-	-	-	-	Leich 4
3S07	20, 23, 24 & 180-WD	DS-18	-	-	-	Amer. Elec. MC-54231
3S08	-	-	-	S-32-P	-	-
3S09	27	-	-	-	-	Siemens 331A.2



SWITCHBOARD CORDS--THREE CONDUCTOR--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	CONDUCTOR COLORS	PLUG LEG REF.	LEG LENGTH	TERMINAL	BOARD END LEG LENGTH "D"	TERMINAL	STAY FASTENER	CORD LENGTH "E"	DIAMETER ** "F"	INTENDED FOR USE WITH THE FOLLOWING PLUGS:
3S01	6	Red White Blue	A B C	1" 1-1/4" 3/4"	Bare 194 194	6" 6" 6"	191A 191A 191A	204	72"	.250"-.270"	Kellogg 201
3S02	7 & 25	Red White Blue	A B C	1" 1-9/32" 3/4"	Bare 194 194	6" 6" 6"	191A 191A 191A	204	72"	.285"-.295"	Kellogg 12, 13, 106, 202, 152; A.E. D-5752 & D-5753
3S03	8	Red Blue White	A B C	1" 7/16" 15/16"	Bare 184 184	6-1/2" 6-1/2" 6-1/2"	191A 191A 191A	204	72"	.260"-.280"	S.C. 53, 53X, 54, 54G, 54N, 55 & 55N
3S04	8-A	Red White Blue	A B C	1/2" 1-7/32" 19/32"	Bare 194B 194A	5" 5" 5"	191A 191A 191A	193B	72"	5/16"	W.E. 310 & 110; Kellogg 191; S.C. 59
3S05	8-B	Red White Blue	A B C	1/2" 1-7/32" 19/32"	Bare 194 194	5" 5" 5"	191A 191A 191A	193B	72"	9/32"	W.E. 309 & 109; Kellogg 185
3S06	8-L & 19	Red White Blue	A B C	1" 7/8" 7/16"	Bare 180 180	6" 6" 6"	190 190 190	204	72"	5/16"	Leich 12A, 14 & 16
3S07	20, 23, 24 & 180-WD	Red White Blue	A B C	3/4" 1-3/32" 5/8"	Bare 242 242	6" 6" 6"	237 237 237	204	72"	5/16"	Amer. Elec. MC-5735 A.E. K-35, K-55 & K-56 (101 & 78)



SWITCHBOARD CORDS--THREE CONDUCTOR--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	CONDUCTOR COLORS	PLUG LEG REF.	LEG LENGTH	TERM- INAL	BOARD END LEG LENGTH "D"	TERM- INAL	STAY FAST- ENER	CORD LENGTH "E"	DIAMETER ** "F"	INTENDED FOR USE WITH THE FOLLOWING PLUGS:
3S08	-	Red White Blue	A B C	1" 1-1/16" 9/16"	Bare 194A 194A	6-1/2" 6-1/2" 6-1/2"	191A 191A 191A	204	72"	.260"-.280"	S.C. 63, 64 & 65
3S09	27	White Blue Red	A B C	7/8" 3/8" 3/4"	170 170 Bare	6" 6" 6"	191A 191A 191A	204	110"	5/16"	Siemens Equipment

** DIAMETERS ARE SHOWN IN THE SAME STYLE FAVORED
BY THE ORIGINAL MANUFACTURER.

SPECIAL SERVICES

We maintain a department which specializes in cord repair work for the convenience of our customers in the telephone industry. These facilities are available for the following repairs:

DAMAGED OR WORN CORDS

Send such cords to us. If upon examination we determine that the cord may be satisfactorily repaired we will complete such repairs for a nominal charge. Any cords found to be damaged or worn beyond repair will be returned.

REBUTTING SWITCHBOARD CORDS

In many instances a cord may be rebutted thus renewing its ability to function satisfactorily. The cost of such work is relatively small and often serves the purpose of prolonging its life of service.

ATTACHING SWITCHBOARD PLUGS

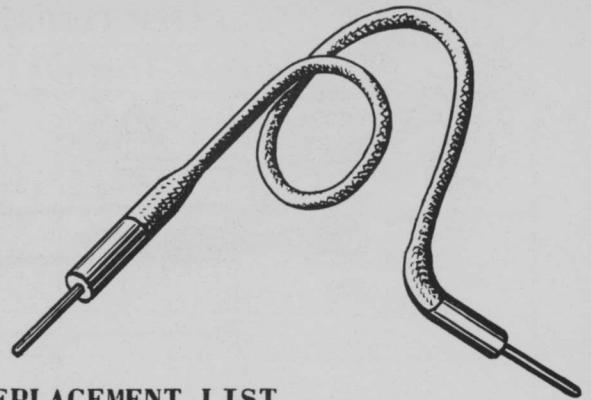
Work of this type, whether the plugs are purchased from us or elsewhere is done at nominal charges.

SPECIAL ORDERS

We make special cords to meet any requirement. Where out-of-the-ordinary cords are wanted . . . special trim . . . or whatever the specifications may demand our engineers will assist in completing your ideas or plans in the matter of special design and equipment.

Runzel

PATCH CORDS



PATCH CORDS--ONE CONDUCTOR--REPLACEMENT LIST

NEW RUNZEL CODE NUMBER	OLD RUNZEL CODE NUMBER	REPLACES AUTOMATIC ELECTRIC NUMBER	REPLACES KELLOGG CODE NUMBER	REPLACES STROMBERG-CARLSON CODE NO.	REPLACES WESTERN ELECTRIC CODE NO.	REPLACES OTHER MANUFACTURERS CODE NOS.
IP01	102	-	-	-	PIA	-
IP02	112	-	-	-	PIB	-
IP03	R5A	-	-	-	*5-A	*Copper wire cord



PATCH CORDS--ONE CONDUCTOR--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	CONDUCTOR COLOR	PLUG END TRIM BOTH ENDS	TERMINAL BOTH ENDS	STANDARD CORD LENGTH	DIAMETER BOTH ENDS **	OUTER BRAID COLOR	INTENDED FOR USE WITH THE FOLLOWING PLUGS ON BOTH ENDS:
IP01	102	White	21/32"	233	2'*	5/16"	Slate	W.E. 116 or 1A
IP02*	112	White	13/16"	158	2'*	5/16"	Red	W.E. 347 or 47 * (Tip connection only)
IP03*	R5A	White	7/8" Bare	Wire Hook	2'*	5/16"	Black	W.E. 1A or 116 *Copper asbestos cord for railroad use.

* BODY LENGTH

**DIAMETERS ARE LISTED IN STYLE FAVORED BY THE ORIGINAL MANUFACTURER

TINSEL CORDAGE

Running length tinsel cordage is available in a choice of either brown or black outer braid.

When ordering please specify number of conductors, 2, 3, 4, 6, available from stock. Larger combinations to order.

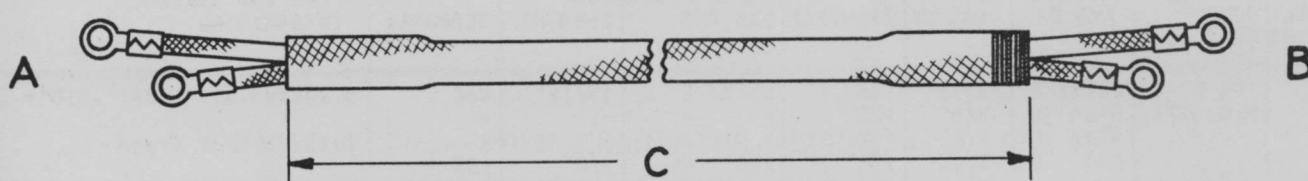
This cordage is made according to RUNZEL standard as described in the fore-part

of this catalog and may be relied upon to fully meet the requirements for which it is intended.

Running length cordage of our "V", "VB", and "VN" moisture-proof and insulated cord is also available. Additional information concerning this series may be found by referring to "CONSTRUCTION DETAILS" chart.

PATCH CORDS--TWO CONDUCTOR--REPLACEMENT LIST

NEW RUNZEL CODE NUMBER	OLD RUNZEL CODE NUMBER	REPLACES AUTOMATIC ELECTRIC CODE NO.	REPLACES KELLOGG CODE NUMBER	REPLACES STROMBERG- CARLSON CODE NO.	REPLACES WESTERN ELECTRIC CODE NO.	REPLACES OTHER MANUFACTURERS CODE NOS.
2P01	101	-	-	-	P2A	-
2P02	103	-	-	-	P2AA	-
2P03	106	-	-	-	P2B	-
2P04	113 & W.U. 525-A	-	-	-	*525	*Mfgd. as 525-A for Western Union
2P05	W.U. 526-A	-	-	-	*526	*Mfgd. as 526-A for Western Union
2P06	104 & W.U. 527	-	-	-	*527	*Mfgd. as 527 for Western Union



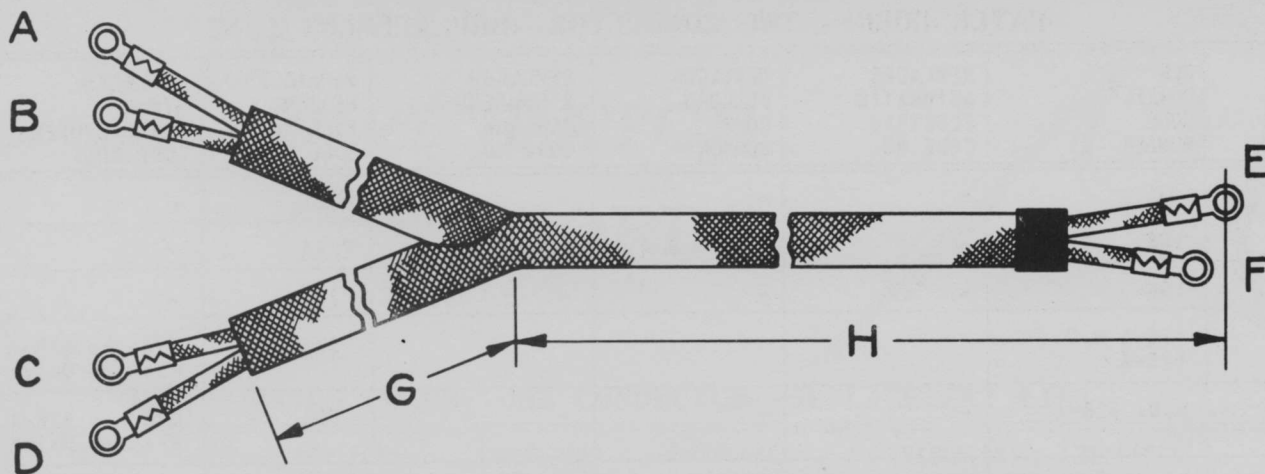
PATCH CORDS--TWO CONDUCTOR--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	CONDUCTOR COLORS	PLUG END TRIM BOTH ENDS	TERMINAL BOTH ENDS	STANDARD CORD LENGTH "C"	DIAMETER BOTH ENDS **	OUTER BRAID COLOR	INTENDED FOR USE WITH THE FOLLOWING PLUGS ON BOTH ENDS:
2P01	101	White Red	13/16" 3/8"	158 158	3'*	5/16"	Red	W.E. 347 or 47
2P02	103	White Red	1-1/4" 1-1/4"	194A 194A	3'*	1/4"	Slate	W.E. 241 (Tip connection only)
2P03	106	White Red	1-7/32" 19/32"	194B 194A	3'*	5/16"	Green	W.E. 310 or 110
2P04	113 & W.U. 526-A	White Red	13/16" 3/8"	158 158	3'*	.310"-.328"	Green	W.E. 347 or 47;
2P05	W.U. 526-A	*White *Red	13/16" 3/8"	158 158	3'*	.310"-.328"	Red	W.E. 347 or 47; W.U. 3A & 3B *Tip and ring colors re- versed at opposite ends.

Note: See Page 41 for specifications on
"Y" Patch Cord Code No. 2P06.

* BODY LENGTH

** DIAMETERS ARE LISTED IN STYLE FAVORED
BY THE ORIGINAL MANUFACTURER

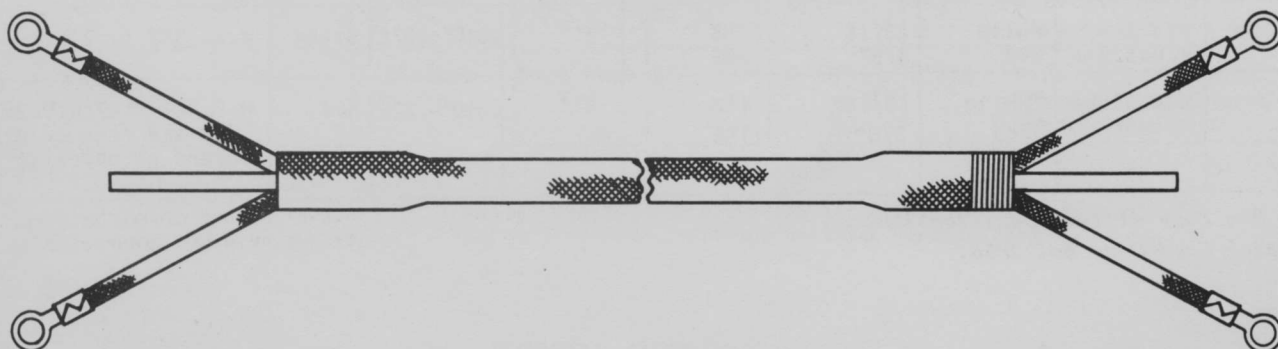


Y PATCH CORD--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	Y PLUG END REF	LEG LENGTHS	TERMINAL	SINGLE PLUG END REF	LEG LENGTHS	TERMINAL	PLUG AND BRAID INFORMATION
2P06	104 & W.U.527A	White A Blue B Blue C Red D	13/16" 3/8" 3/8" 13/16"	158 158 158 158	White E - - Red F	13/16" - - 3/8"	158 - - 158	Diameter all ends: .310"- .328" Outer Braid: Green Intended for use with: W.E.347 or 47; W.U.3A & 3B PLUGS.
		G LENGTH-12-1/2"			LENGTH-H-24-1/2"			

PATCH CORDS--THREE CONDUCTOR--REPLACEMENT LIST

NEW RUNZEL CODE NUMBER	OLD RUNZEL CODE NUMBER	REPLACES AUTOMATIC ELECTRIC CODE NO.	REPLACES KELLOGG CODE NUMBER	REPLACES STROMBERG-CARLSON CODE NO.	REPLACES WESTERN ELECTRIC CODE NO.	REPLACES OTHER MANUFACTURERS CODE NOS.
3P01	109	-	-	-	P3E	-



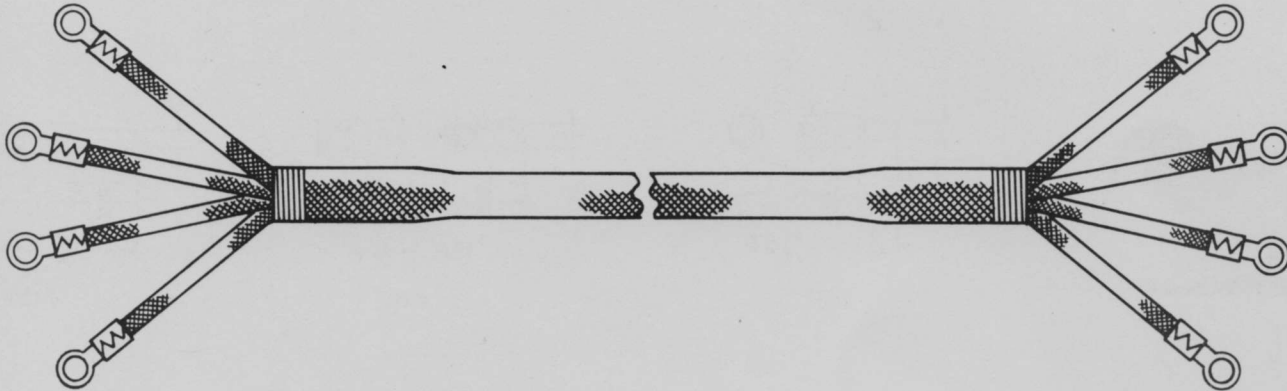
PATCH CORDS--THREE CONDUCTOR--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	CONDUCTOR COLORS	PLUG END TRIM BOTH ENDS	TERMINAL BOTH ENDS	STANDARD CORD LENGTH	DIAMETER BOTH ENDS **	OUTER BRAID COLOR	INTENDED FOR USE WITH THE FOLLOWING PLUGS ON BOTH ENDS:
3P01	109	White Red Blue	1-7/32" 1/2" 1 9/32"	194B Bare 194A	6'	5/16"	Slate	W.E. 310 or 110; also S.C. 59

**DIAMETER IS SHOWN IN STYLE FAVORED BY THE ORIGINAL MANUFACTURER

PATCH CORDS--FOUR CONDUCTOR--REPLACEMENT LIST

NEW RUNZEL CODE NO. NUMBER	OLD RUNZEL CODE NUMBER	REPLACES AUTOMATIC ELECTRIC CODE NO.	REPLACES KELLOGG CODE NUMBER	REPLACES STROMBERG- CARLSON CODE NO.	REPLACES WESTERN ELECTRIC CODE NO.	REPLACES OTHER MANUFACTURERS CODE NOS.
4P01	110	-	-	-	P4A	-



PATCH CORDS--FOUR CONDUCTOR--SPECIFICATIONS

NEW RUNZEL CODE NO.	OLD RUNZEL CODE NO.	CONDUCTOR COLORS	PLUG END TRIM BOTH ENDS	TERMINAL BOTH ENDS	STANDARD CORD LENGTH	DIAMETER BOTH ENDS **	OUTER BRAID COLOR	INTENDED FOR USE WITH THE FOLLOWING PLUGS ON BOTH ENDS:
4P01	110	GREEN WHITE BLUE RED	1-3/16" 1-5/8" 1-5/8" 1-3/16"	158 158 158 158	As SPECIFIED	5/16"	SLATE	W.E. 154

**DIAMETER IS SHOWN IN STYLE FAVORED
BY THE ORIGINAL MANUFACTURER

SERVICE TO THE TELEPHONE INDUSTRY

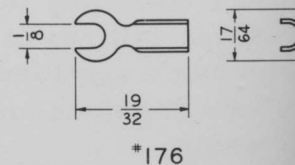
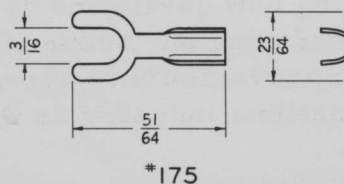
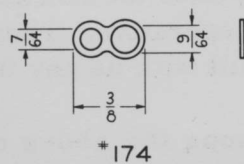
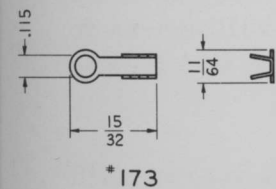
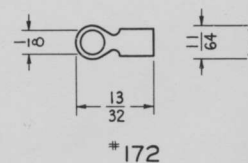
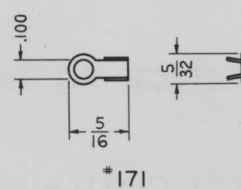
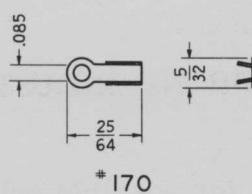
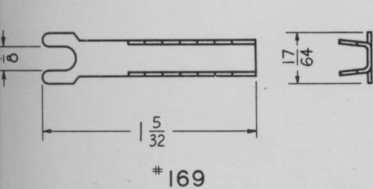
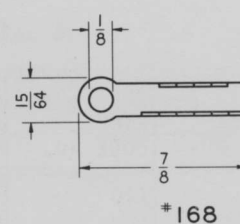
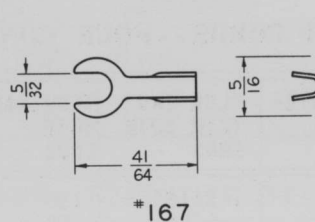
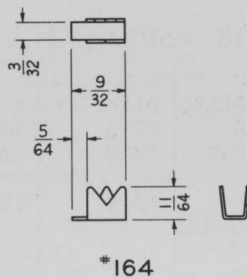
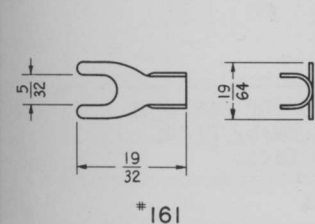
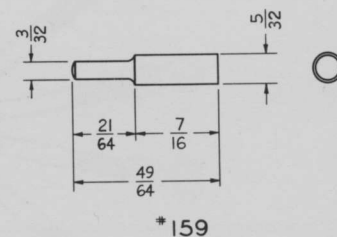
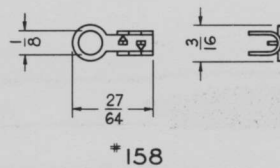
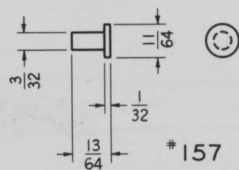
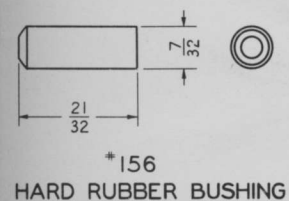
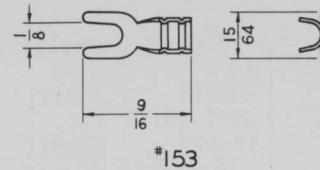
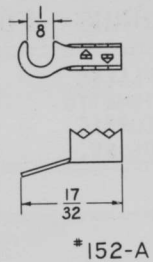
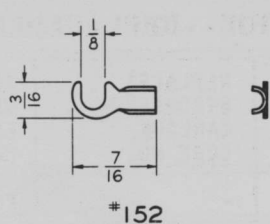
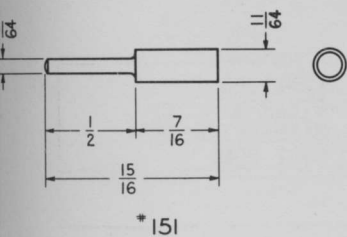
For many years the RUNZEL CORD & WIRE CO. has devoted its facilities to the advancement of its service to the telephone industry.

Skilled engineers are at work constantly, experimenting and testing new developments which will result in broadening our scope of service and furnish improvements in service for the communications industry as a whole.

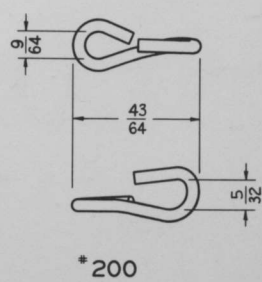
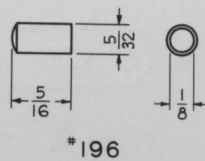
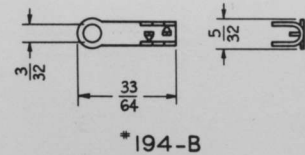
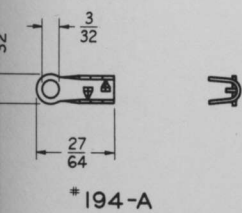
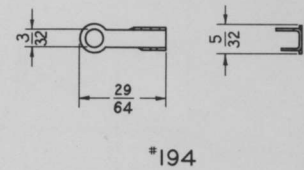
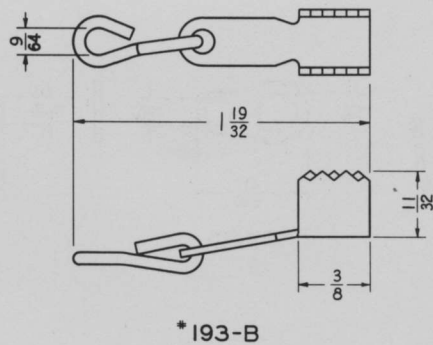
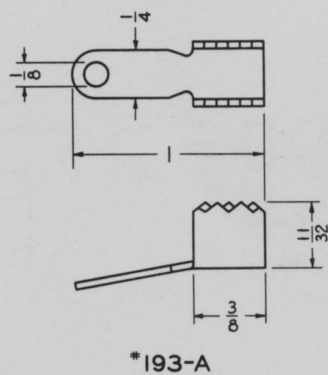
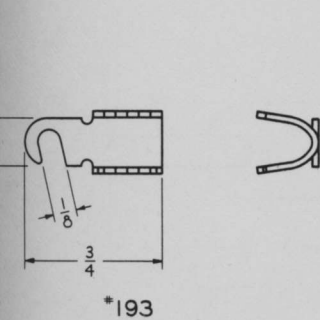
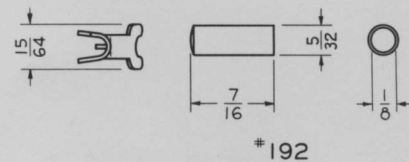
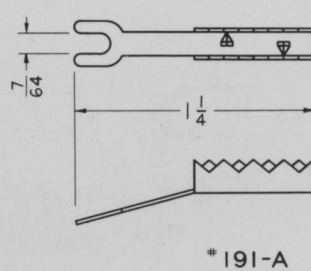
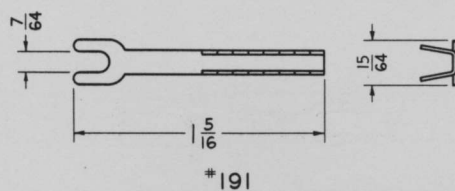
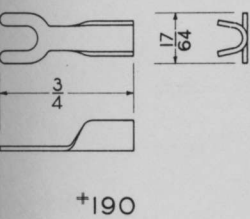
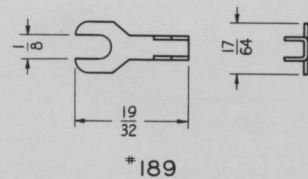
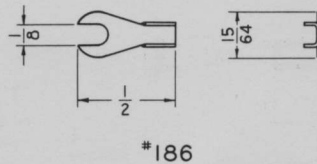
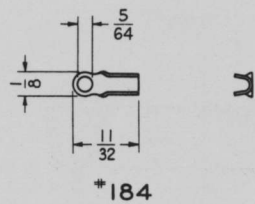
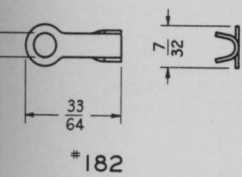
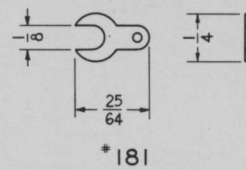
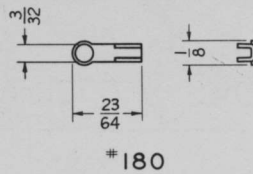
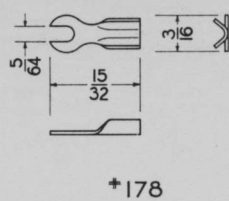
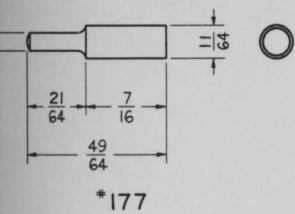
We welcome your requests to assist in the development of new ideas . . . in fact we encourage you to submit your problems to

us for possible solution. We realize that you who are in constant touch with practicality often are confronted with problems of service. Lack of special facilities necessary to cord manufacture makes it impossible for you to develop your ideas. We on the other hand, have the facilities and the willingness to be cooperative. Therefore please feel free to consult with us any time.

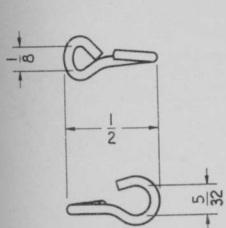
We hope the above dissertation leaves with you the thought of its intended purpose: That the RUNZEL CORD & WIRE CO. seeks your cooperation to the ultimate improvement of SERVICE TO THE TELEPHONE INDUSTRY.



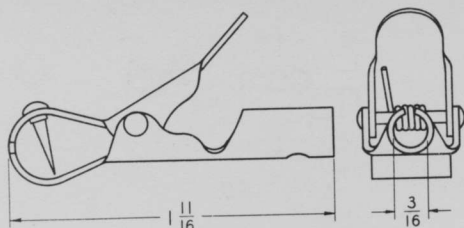
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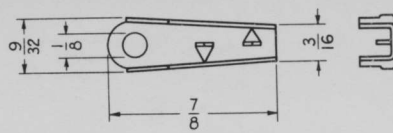
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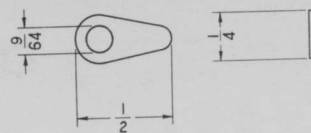
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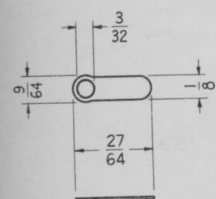
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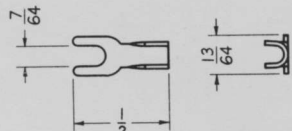
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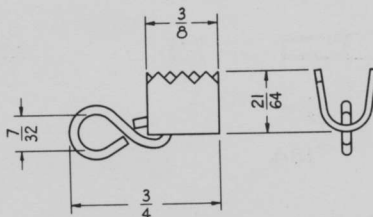
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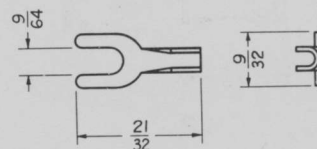
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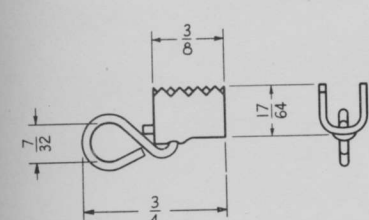
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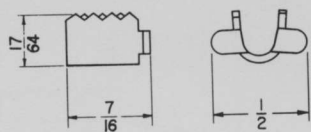
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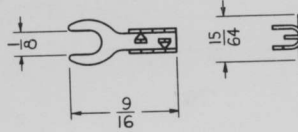
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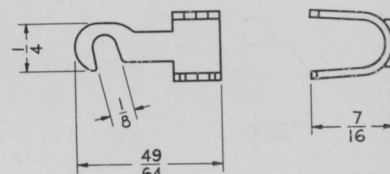
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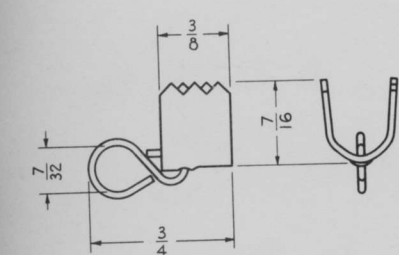
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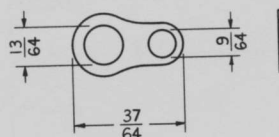
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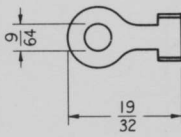
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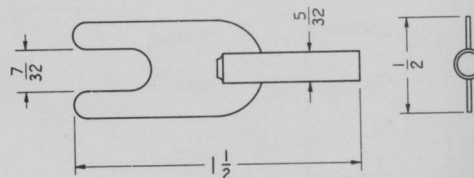
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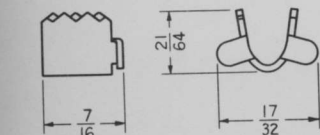
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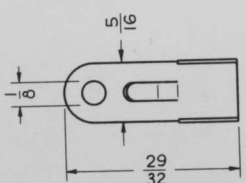
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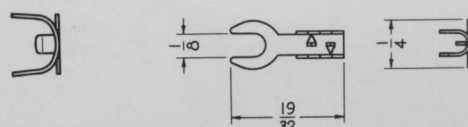
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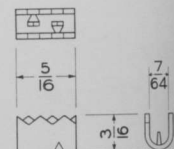
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#230

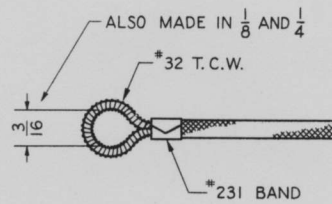
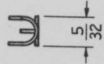
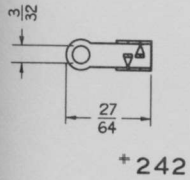
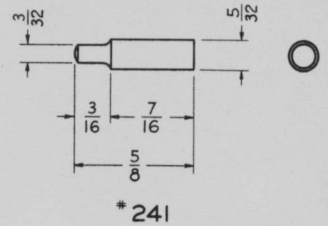
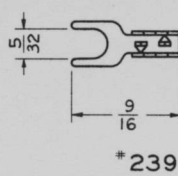
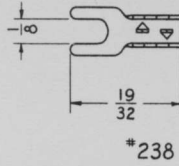
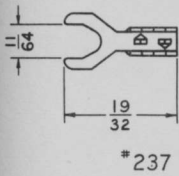


#233



#235

TERMINALS SHOWN ARE ACTUAL SIZE



TINSEL LOOPS

